

# EIC2100 COMMERCIAL DATABASE SEARCH REQUEST

Staff Use Only

## Complete 705 Template Search Requested

RUSH - SPE signature required: \_\_\_\_\_

Access DB# \_\_\_\_\_

Business Methods Case: 705/ 30

Write in 705 subclass(es) to search required files for 705 cases or cases cross referenced in 705.

Requester's Full Name: Elaine Gort Examiner #: 77459 Date: 1/20/04

Art Unit: 3627 Phone Number 703/308-6391 Serial Number: 91693563

Bldg & Room #: PK5 7B21 Results Format Preferred: PAPER

If more than one search is submitted, please prioritize searches in order of need.

Provide the PALM Bib page or the following:

Title of Invention: see attached bib sheet

Inventors (provide full names): see b.b. sheet

Earliest Priority Filing Date: 10/20/00

Requested attachments:

- If possible, provide the cover sheet, the IDS, examples, or relevant citations, authors, etc, if known.
- Please attach copies of the parts of this case that help explain or are most pertinent to this search. Examples are: abstract, background, summary, claim(s) [not all of the claims].

See particularly claims 10 + 18

The claimed or apparent novelty of the invention is:

A system for armored car pickups of cash register, safe assemblies which utilizes a sequence number and an alternate sequence number where the alternate sequence number is updated when there is a pickup and the sequence number is updated at the end of a business day on which the pickup occurred to match the alternate sequence number.

This search should focus on:

(Also include keywords or synonyms)

the above procedure of modifying/updating the  
sequence numbers



Special Instructions or Other Comments

Thanks Elaine Gort

ASRC Searcher: Jeanne Horrigan  
Serial 097693563  
January 29, 2004

CAS 14

49

Upd  
Review  
1/10/04

File 387:The Denver Post 1994-2004/Jan 23  
File 471:New York Times Fulltext 90-Day 2004/Jan 26  
File 492:Arizona Repub/Phoenix Gaz 19862002/Jan 06  
File 494:St LouisPost-Dispatch 1988-2004/Jan 26  
File 498:Detroit Free Press 1987-2004/Jan 23  
File 631:Boston Globe 1980-2004/Jan 25  
File 633:Phil.Inquirer 1983-2004/Jan 25  
File 638:Newsday/New York Newsday 1987-2004/Jan 26  
File 640:San Francisco Chronicle 1988-2004/Jan 27  
File 641:Rocky Mountain News Jun 1989-2004/Jan 24  
File 702:Miami Herald 1983-2004/Jan 25  
File 703:USA Today 1989-2004/Jan 26  
File 704:(Portland)The Oregonian 1989-2004/Jan 26  
File 713:Atlanta J/Const. 1989-2004/Jan 25  
File 714:(Baltimore) The Sun 1990-2004/Jan 27  
File 715:Christian Sci.Mon. 1989-2004/Jan 27  
File 725:(Cleveland)Plain Dealer Aug 1991-2004/Jan 18  
File 735:St. Petersburg Times 1989- 2004/Jan 25  
File 717:The Washington Times Jun 1989-2004/Jan 26  
File 743:(New Jersey)The Record 1989-2004/Jan 26

Set	Items	Description
S1	0	BROOKS AND RUSHIE AND DUPLANTI
S2	146448	BROOKS OR RUSHIE OR DUPLANTI
S3	126340	DEPOSIT? ?
S4	813	S2 AND S3
S5	479897	SAFE OR SAFES OR CASH()REGISTER? ?
S6	112	S4 AND S5
S7	7721	(ARMORED OR ARMOURED) () (CAR OR CARS)
<b>S8</b>	<b>1</b>	<b>S6 AND S7 [not relevant]</b>
S9	10	S3(5N)S5(S)S2
S10	9	RD (unique items)
<b>S11</b>	<b>9</b>	<b>S10 NOT S8 [not relevant]</b>

File 34:SciSearch(R) Cited Ref Sci 1990-2004/Jan W3  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
File 65:Inside Conferences 1993-2004/Jan W4  
File 202:Info. Sci. & Tech. Abs. 1966-2004/Jan 20  
File 2:INSPEC 1969-2004/Jan W3

Set	Items	Description
S1	8	AU='BROOKS WF'
S2	11	AU='BROOKS, W.F.'
S3	8	AU='BROOKS WF'
S4	19	S1:S3
<b>S5</b>	<b>13</b>	<b>RD (unique items) [not relevant]</b>

File 348:EUROPEAN PATENTS 1978-2004/Jan W04  
File 349:PCT FULLTEXT 1979-2002/UB=20040122,UT=20040115

Set	Items	Description
S1	1	AU='BROOKS WILLIAM F'
S2	2	AU='RUSHI'
<b>S3</b>	<b>3</b>	<b>S1:S2 [not relevant]</b>

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200406  
File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)  
File 371:French Patents 1961-2002/BOPI 200209  
Set Items Description

S1            2     AU='BROOKS W F'

1/7/1        (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013464975     \*\*Image available\*\*

WPI Acc No: 2000-636918/200061

Cash management system for use in stores, has drop safe with bill validator to determine denomination of bills and interface panel mounted on its sides

Patent Assignee: BROOKS ARMORED CAR SERVICES INC (BROO-N)

Inventor: BLUEBELLO J K; BROOKS W F ; FRONTINO L J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6067530	A	20000523	US 95542984	A	19951013	200061 B

Priority Applications (No Type Date): US 95542984 A 19951013

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

US 6067530	A	28	G06F-017/60	
------------	---	----	-------------	--

Abstract (Basic): US 6067530 A

NOVELTY - A bill validator determines denomination of bills secured in drop safe during transaction. A controller (36) electronically coupled to validator and physically separated from drop safe, tracks information relevant to bills secured in drop safe (24). An interface panel mounted on the sides of drop safe couples bill validator to controller. A removable canister secures bills within the drop safe.

DETAILED DESCRIPTION - A printer is coupled to controller to get a print out of relevant information of bills secured in drop safe. An INDEPENDENT CLAIM is also included for cash management method.

USE - For securing and accounting bills received during transaction in business establishment such as bank, stores, etc.

ADVANTAGE - Since redundancy counting of money is performed, duplicative counting is eliminated and disruption to customer service is also avoided.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of cashier's station.

Drop safe (24)

Controller (36)

pp; 28 DwgNo 2B/8

Derwent Class: T01; T05

International Patent Class (Main): G06F-017/60

Serial 09//693563

January 29, 2004

File 35:Dissertation Abs Online 1861-2004/Dec  
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
File 65:Inside Conferences 1993-2004/Jan W4  
File 2:INSPEC 1969-2004/Jan W3  
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep  
File 474:New York Times Abs 1969-2004/Jan 28  
File 475:Wall Street Journal Abs 1973-2004/Jan 28  
File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Dec  
File 256:SoftBase:Reviews,Companies&Prods. 82-2004/Dec

Set	Items	Description
S1	1681383	NUMBER??? OR NUMERAL? ? OR NUMERIC?
S2	642296	SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE-
	NT	
S3	2769563	DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?
S4	1211862	ALTERNATE OR DIFFERENT
S5	2595605	TWO
S6	3555554	2
S7	2634510	UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?-???
S8	1496	S2()S1
S9	627	S1()S2
S10	19431	S3(2N)S1
S11	20873	S4(2N)S1
S12	18559	S5(2N)S1
S13	15415	S6(2N)S1
S14	3507	S2(2W)S1
S15	3068	S1(2W)S2
S16	124	S10:S13(3N)S14
S17	103	S10:S13(3N)S15
S18	86	S10:S13(3N)S8:S9
S19	82	RD (unique items)
S20	9	S19/2001:2004
S21	73	S19 NOT S20
S22	2	<b>S7(5N)S21</b>
S23	18	S7 AND S21
S24	16	S23 NOT S22
<b>S25</b>	<b>16</b>	<b>Sort S24/ALL/PY,A</b>
S26	38	S16:S17 AND S7
S27	20	S26 NOT S23
S28	20	RD (unique items)
S29	0	S28/2001:2004
<b>S30</b>	<b>20</b>	<b>Sort S28/ALL/PY,A</b>
S31	248420	SECURITY OR SECURE OR SAFEGUARD??? OR SURETY
S32	342715	PROTECT???
S33	13	S16:S17 AND S31:S32
S34	10	S33 NOT (S23 OR S26)
S35	9	RD (unique items)
S36	2	S35/2001:2004
<b>S37</b>	<b>7</b>	<b>S35 NOT S36</b>

22/7/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

00758608 INSPEC Abstract Number: C75011580

Title: Decimal tabulation and text centering

Author(s): Douglas, G.L.; Haydon, F.C.  
Author Affiliation: IBM, Armonk, New York, NY, USA  
Journal: IBM Technical Disclosure Bulletin vol.17, no.9 p.2528  
Publication Date: Feb. 1975 Country of Publication: USA  
CODEN: IBMTAA ISSN: 0018-8689  
Language: English Document Type: Journal Paper (JP)  
Treatment: Practical (P)

Abstract: A unique decimal tabulation (DT) code is entered into the memory of a text processing system preceding a group of numerical textual codes including a decimal point code. When the code sequence is read from the memory for playout or display, the system, upon reading the DT code, scans **forward** through the **group of succeeding numerical codes**, accumulating the total print or display escapement of these codes, until the decimal point code is detected. An accumulation of backspace codes equal to the total escapement of the numerical codes is transmitted to the printer or display before the numerical codes are transmitted. The decimal point in the sequence of numerical codes is positioned at the printer or display location immediately preceding the detection of the DT code, to facilitate alignment of decimal points in columns of numerical data. By a similar process, a unique centering code is entered into memory preceding a group of textural codes to be centered. (0 Refs)

Subfile: C

**22/7/2 (Item 2 from file: 2)**

DIALOG(R)File 2:INSPEC  
(c) 2004 Institution of Electrical Engineers. All rts. reserv.  
00130973 INSPEC Abstract Number: B70019264  
**Title: Speed regulation in induction machines by pole-changing with three successive numbers of pole-pairs**

Author(s): Pammer, B.  
Journal: Elektrotechnik und Maschinenbau vol.87, no.1 p.47-51  
Publication Date: Jan. 1970 Country of Publication: Austria  
CODEN: EKMBAA ISSN: 0012-8058  
Language: German Document Type: Journal Paper (JP)  
Abstract: In this article it is shown that with induction motors with a pole-number change by the increase or reduction between conductors in adjacent slots, the appearance of a torsional angle by induced voltages is possible. The change of torsional angle can be effected by the mutual action of the two currents with different phase relationship in each slot. The practicability of the speed control of induction motors was demonstrated with an experimental machine.

Subfile: B

**25/6/1 (Item 1 from file: 2)**

00122575 INSPEC Abstract Number: C70007763  
**Title: Analog-to-digital conversion subroutines developed on the PDP-7 under the 9-to-7 retrofit of the advanced software system**  
Publication Date: 1969

**25/6/2 (Item 2 from file: 2)**

00392640 INSPEC Abstract Number: B72018984  
**Title: The calculation of matrices characterizing double-circuit three-phase transmission lines**  
Publication Date: 1971

**25/6/4 (Item 4 from file: 2)**

00987775 INSPEC Abstract Number: C76031180  
**Title: Analysis of multicircuit shells of revolution by the field method**  
Publication Date: July-Aug. 1976

25/6/5 (Item 5 from file: 2)

01441968 INSPEC Abstract Number: A80004906  
**Title: Minimal anomaly-free electroweak model for several generations**  
Publication Date: 1 Sept. 1979

25/6/6 (Item 6 from file: 2)

01573449 INSPEC Abstract Number: B80047080  
**Title: Asynchronous two-speed pole-changing motors with three-phase switch-over winding**  
Publication Date: April 1980

25/6/8 (Item 8 from file: 2)

02342347 INSPEC Abstract Number: B84060666, C84049444  
**Title: An impulsive noise simulator for the laboratory testing of radio communication systems**  
Publication Date: 1984

25/6/12 (Item 12 from file: 35)

01378634 ORDER NO: AAD94-29515  
**ASTRONOMICAL FORCING, ANCIENT CLIMATIC CHANGE AND THE SEDIMENTARY RECORD: THE MESOZOIC OF THE SOUTHERN ALPS**  
Year: 1994

25/6/13 (Item 13 from file: 2)

5239603 INSPEC Abstract Number: A9610-8760M-015, C9605-7330-256  
**Title: Comparison of simulated annealing algorithms for conformal therapy treatment planning**  
Publication Date: 1 Dec. 1995

25/6/14 (Item 14 from file: 2)

5976075 INSPEC Abstract Number: A9817-9260S-001  
**Title: Evidence for solar-cycle forcing and secular variation in the Armagh Observatory temperature record (1844-1992)**  
Publication Date: 27 May 1998

25/7,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC  
(c) 2004 Institution of Electrical Engineers. All rts. reserv.  
00301697 INSPEC Abstract Number: C71020112  
**Title: Comparison of a series of successive numbers predetermined by a numerical-pulse code**  
Author(s): Polisskii, Yu.D.  
Journal: Mekhanizatsiya i Avtomatzatsiya Proizvodstva no.3 p.27-9  
Publication Date: 1971 Country of Publication: USSR  
CODEN: MAVPAC ISSN: 0025-8873  
Language: Russian Document Type: Journal Paper (JP)  
Treatment: Theoretical (T)  
Abstract: Two algorithms of comparison for selecting the maximum and minimum of the successively **following** numbers which are recorded in two registers are analysed. One register features an additive counting input while the other one includes a subtracting input. On the basis of a block-diagram of the comparison algorithm for the two types, relationships

for the variables of the corresponding signals in processing the operators are derived. The logical description of the algorithms indicates that their efficiency is equal when the comparison is made of numbers recorded in a system with any arbitrary base.

Subfile: C

...Identifiers: series of successive numbers ;

**25/7,K/7 (Item 7 from file: 2)**

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

01862273 INSPEC Abstract Number: C82023096

Title: Data set usage sequence number

Author(s): Huff, K.L.

Author Affiliation: IBM Corp., Armonk, NY, USA

Journal: IBM Technical Disclosure Bulletin vol.24, no.5 p.2404-6

Publication Date: Oct. 1981 Country of Publication: USA

CODEN: IBMTAA ISSN: 0018-8689

Language: English Document Type: Journal Paper (JP)

Treatment: Applications (A); Practical (P)

Abstract: Describes a method for operating a multi-CPU computing system such that during reconstruction of a data set from change information recorded on a plurality of system logs, the log data is available for reconstructing the data set in the same order in which the log data was created. (0 Refs)

Subfile: C

Identifiers: data set usage sequence number ;

**25/7,K/9 (Item 9 from file: 2)**

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

02701044 INSPEC Abstract Number: C86040395

Title: Programme and data software for system of operational control for transport-storage complex in FMS

Author(s): Mazurov, A.A.

Journal: Mekhanizatsiya i Avtomatizatsiya Proizvodstva no.3 p.44-6

Publication Date: 1986 Country of Publication: USSR

CODEN: MAVPAC ISSN: 0025-8873

Language: Russian Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The data base is used to schedule operations by shift and by day in a storage and distribution complex. The data base is organised hierarchically; at the highest level a key is generated designating a production module, work station and equipment. The key search is implemented by interrogation and despatch of transport to a work station in order to implement the work. Interrogation indicates whether a particular job is complete or still in hand; the data base is constantly updated with the job numbers of work in hand. Consequently, at the lowest level of the data base structure is a set of 'job numbers' and 'sequence numbers'. At a third level the work in progress and completed is compared and checked against orders. Within the software the transport system is represented as a Petri network, which is used to plan work sequences so as to minimise time spent in tool changing or other productivity criteria.

Subfile: C

**25/7,K/10 (Item 10 from file: 35)**

DIALOG(R)File 35:Dissertation Abs Online

(c) 2004 ProQuest Info&Learning. All rts. reserv.

01107820 ORDER NO: AAD90-14834

**SUMMABILITY MATRICES THAT PRESERVE VARIOUS TYPES OF SEQUENTIAL EQUIVALENCE**

Author: MOUSA, MAROUF SAID

Degree: PH.D.

Year: 1989

Corporate Source/Institution: KENT STATE UNIVERSITY (0101)

Director: JOHN A. FRIDY

Source: VOLUME 51/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 240. 73 PAGES

In 1980 Pobyvanets introduced the concept of asymptotically regular matrices. Such matrices preserve the asymptotic equivalence of two nonnegative **number sequences**; that is, if the quotient  $\lim_{n \rightarrow \infty} \frac{x_n}{y_n}$  has limit 1 then the quotient  $\lim_{n \rightarrow \infty} \frac{Ax_n}{Ay_n}$  of the transformed sequences also has limit 1. In the asymptotic comparison of two sequences, the term-by-term ratio  $\lim_{n \rightarrow \infty} \frac{x_n}{y_n}$  is usually used but the frequent occurrence of terms having zero value makes the term-by-term ratio inapplicable in many cases. Therefore in 1978 Fridy introduced new definitions and notations for comparing rates of convergences in which he avoided most of the difficulties of zero value terms. In this dissertation we give a new proof of Pobyvanets' theorem and we introduce the concept of "asymptotically conservative" to describe a matrix  $A$  for which  $\lim_{n \rightarrow \infty} \frac{\|x_n\|}{\|y_n\|} = 1$  implies that  $\|Ax_n\| = O(Ay_n)$  and  $\|Ay_n\| = O(Ax_n)$ . In doing so we introduce the phrase "mutually dominant" to describe a pair of sequences in which each of the sequences is dominated by a multiple of the other. Among the results proved herein are the **following**: a sufficient condition for a matrix to be asymptotically conservative, several analogues of Pobyvanets' theorem using ratios other than term-by-term, necessary and sufficient conditions for a matrix to preserve the mutually dominant concept and theorems concerning the relationships between various types of sequential equivalence.

**25/7,K/11 (Item 11 from file: 233)**

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2003 EBSCO Pub. All rts. reserv.

00297434 92PF12-008

**Exploiting the data fill command**

Conatser, Kelly R

PC World Lotus Edition , December 1, 1992 , v10 n12 pL39-L40, 2 Page(s)

ISSN: 0737-8939

Company Name: Lotus Development

Product Name: Lotus 1-2-3

IMPROVING YOUR SKILLS column presents a tutorial on the use of 1-2-3's Data Fill command to enter a group of values that are part of a sequence. The Data Fill command in release 3 can not only fill a sequence of numbers but also a sequence of dates, and the SmartPak add-in for 1-2-3 for Windows 1.1 includes SmartFill, an advanced data-entry utility that allows users to avoid the Data Fill command entirely in most cases. Provides step-by-step instructions on using the Data Fill command to create several sets of numerical sequences and contrasts the capabilities of the Data Fill command with those of SmartFill. Includes one screen display. (djd)

**25/7,K/15 (Item 15 from file: 2)**

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

6240844 INSPEC Abstract Number: C1999-06-6160D-011

Serial 09//693563

January 29, 2004

**Title: A design and implementation of savepoints and partial rollbacks considering transaction isolation levels of SQL2**

Author(s): Sun Hwan Kim; Mi Suk Jung; Jun Hyun Park; Young Chul Park

Author Affiliation: Dept. of Comput. Sci., Kyungpook Nat. Univ., Taegu, South Korea

Conference Title: Proceedings. 6th International Conference on Advanced Systems for Advanced Applications p.303-12

Editor(s): Chen, A.L.P.; Lochovsky, F.H.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1999 Country of Publication: USA xii+356 pp.

ISBN: 0 7695 0084 6 Material Identity Number: XX-1999-01043

U.S. Copyright Clearance Center Code: 0 7695 0084 6/99/\$10.00

Conference Title: Proceedings. 6th International Conference on Database Systems for Advanced Applications

Conference Sponsor: Nat. Tsing Hua Univ.; Nat. Sci. Council; Minstr. Educ.; Inf. Process. Soc. Japan

Conference Date: 19-21 April 1999 Conference Location: Hsinchu, Taiwan

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A partial rollback of a transaction restores the state of the transaction and the database to the state in which they have been right after the savepoint to be rolled back has been established. The paper considers the correctness of savepoints and partial rollbacks. First, a savepoint sequence number is assigned to each savepoint. According to that, without generating any savepoint log record upon establishing savepoints, all the valid savepoints of a transaction can have **different savepoint sequence numbers** and the order of establishment of each valid savepoint can be discriminated efficiently. Second, the lock request entries of the manual duration are not deleted from the lock table as far as some savepoints which are established after the locks are requested but before the locks are released are valid. That guarantees the correctness of savepoints and partial rollbacks under the circumstances of supporting the four transaction isolation levels of SQL2. Third, the concept of the mini-savepoint that preserves the atomicity of **update** operations of the SQL level is extended and adopted to triggers and stored procedures. According to that, the atomicity of triggers and stored procedures is supported and the scope of savepoint names is restricted to the internal of the corresponding triggers or stored procedures. (13 Refs)

Subfile: C

Copyright 1999, IEE

...Identifiers: **update** operations

**25/7,K/16 (Item 16 from file: 256)**

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

(c)2004 Info.Sources Inc. All rts. reserv.

00101481 DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft DirectPlay (624616)

TITLE: Software Security and the DirectPlay API

AUTHOR: Wilson, Andrew

SOURCE: Dr Dobb's Journal, v22 n4 p66(3) Apr 1997

ISSN: 1044-789X

Homepage: <http://www.ddj.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

Microsoft's Microsoft DirectPlay application programming interface (API),

which is a subset of the DirectX Software Developers' Kit for Windows 95, is described; DirectPlay can prevent software piracy by making an intelligent application that can recognize piracy. DirectPlay API is designed to generate or attach to a session; to generate a player; to generate a player list; and to communicate with other players in the session. A session is a serial number, a player is an instance of the application, and the player list is the valid-user-license count. Three transport methods are supported: IPX, TCP/IP, and modem. The security model described involves writing a block of code invoked during application startup that first uses the serial number to determine if other systems use that number. It then checks how many users the license allows. If the user count is within limits, the application enters the **serial number group** and allows the user to continue. Another check takes place, and if any parameter is violated, the user is determined to be running a pirated copy of the application. The **following** topics are covered: the model, the network, DirectX SDK, and using the model provided in a real-world setting.

REVISION DATE: 19990330

**30/6/1 (Item 1 from file: 2)**  
01334830 INSPEC Abstract Number: C79013547  
**Title: A random-number generator**  
Publication Date: Sept.-Oct. 1977

**30/6/4 (Item 4 from file: 2)**  
03325799 INSPEC Abstract Number: A89038925  
**Title: Bimodality and the Hale cycle**  
Publication Date: 1988

**30/6/6 (Item 6 from file: 2)**  
03487590 INSPEC Abstract Number: A89131004, C89069262  
**Title: Data assimilation into a numerical equatorial ocean model. II. Assimilation experiments**  
Publication Date: June 1989

**30/6/7 (Item 7 from file: 35)**  
1079879 ORDER NO: AAD89-22750  
**SYNTHESIS OF PROSTANOIDS**  
Year: 1989

**30/6/9 (Item 9 from file: 35)**  
01208009 ORDER NO: AADD--94922  
**THE STRUCTURE AND EVOLUTION OF A RODENT SERINE PROTEINASE INHIBITOR GENE COMPLEX (MICE)**  
Year: 1990

**30/6/10 (Item 10 from file: 35)**  
01163978 ORDER NO: AAD91-18386  
**MYOSIN SUBUNIT ASSEMBLY: PURIFICATION OF NASCENT MYOSIN FOLLOWING IN VITRO TRANSLATION OF SKELETAL MUSCLE MRNA AND ANALYSIS OF SKELETAL MYOSIN HEAVY CHAIN ISOFORM COMPOSITION DURING DEVELOPMENT**  
Year: 1990

**30/6/11 (Item 11 from file: 35)**  
01172907 ORDER NO: AAD91-27995  
**CHARACTERISTICS OF CITATIONS IN GEOSCIENCE DOCTORAL DISSERTATIONS ACCEPTED AT UNITED STATES ACADEMIC INSTITUTIONS, 1981-1985**

Year: 1991

30/6/12 (Item 12 from file: 475)  
06778553

WHO'S NEWS: CBS ENTERTAINMENT PRESIDENT RESIGNS; SAGANSKY LET NETWORK TO  
NO. 1 POSITION  
Friday April 15 1994

30/6/13 (Item 13 from file: 2)  
4597354 INSPEC Abstract Number: A9406-4740-004  
Title: The stability of imploding detonations: results of numerical  
simulations  
Publication Date: Jan. 1994

30/6/14 (Item 14 from file: 2).  
5025824 INSPEC Abstract Number: A9518-8745-013  
Title: Do adaptations in serial sarcomere number occur with strength  
training?  
Publication Date: June 1995

30/6/15 (Item 15 from file: 35)  
01432535 ORDER NO: AADAA-I9531358  
MOLECULAR MODELING OF METAL ION BINDING IN CALCIUM-BINDING PROTEINS  
(CALMODULIN)  
Year: 1995

30/6/18 (Item 18 from file: 35)  
01843357 ORDER NO: AADAA-I3020184  
Analysis of AAV integration, and evaluation of recombinant angiostatin for  
gene therapy  
Year: 1999

30/6/19 (Item 19 from file: 2)  
6820680 INSPEC Abstract Number: A2001-05-8745-003  
Title: A spherical rotation coordinate system for the description of  
three-dimensional joint rotations  
Publication Date: Nov. 2000

30/7,K/2 (Item 2 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2004 Institution of Electrical Engineers. All rts. reserv.  
01728959 INSPEC Abstract Number: A81079597  
Title: Sensitivity analysis of the meteorological model applied in the  
German reactor risk study (DRS)  
Author(s): Vogt, S.  
Author Affiliation: KFA, Karlsruhe, West Germany  
Conference Title: Seminar on Radioactive Releases and their Dispersion in  
the Atmosphere Following a Hypothetical Reactor Accident Part I p.  
539-54  
Publisher: Comm. European Communities, Luxembourg  
Publication Date: 1980 Country of Publication: Luxembourg xii+554 pp.  
Conference Date: 22-25 April 1980 Conference Location: Roskilde,  
Denmark  
Language: English Document Type: Conference Paper (PA)  
Treatment: Theoretical (T)  
Abstract: The occurrence of a hypothetical reactor accident is an

extremely improbable event. If in the course of such an event radioactive material is released from the containment into the atmosphere, this might impair the health of the population living in the environment of the reactor site. The extent of impairment is determined by the **following** parameters: the type and amount of radioactive material released into the atmosphere; the meteorological conditions prevailing at the time of the accident and thereafter; the population concerned. In the DRS consequence model a representative selection is taken for each of these three parameter groups. For the second **group** a **number** of **sequences** of weather conditions is selected. A sensitivity analysis of the meteorological model leaves unchanged the first and last group of parameters included in the listing above and **changes** only internal parameters and model assumptions in the meteorological model. The submodels of dose computation, of protective and counter actions and of health damage also remain unchanged.

(6 Refs) Subfile: A

**30/7,K/3 (Item 3 from file: 2)**

DIALOG(R)File 2:INSPEC  
(c) 2004 Institution of Electrical Engineers. All rts. reserv.  
02289430 INSPEC Abstract Number: B84041418

**Title: Analysis of delayed m sequence**

Author(s): Zhou Da-hua

Author Affiliation: Northwest Inst. of Nuclear Technol., China

Journal: Acta Electronica Sinica vol.11, no.6 p.22-7

Publication Date: Nov. 1983 Country of Publication: China

CODEN: TTHPAG ISSN: 0372-2112

Language: Chinese Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: The method of expressing the state of a shift register by Walsh Hadamard Function is used to solve the **following** two problems: (1) the number of bits of delay with which a delayed m sequence is made of Modulo 2 adders of two or several delayed m **sequences**; (2) the **number** of bits of delay with which a delayed m sequence is made of Modulo 2 adders of any number of stages for a generator of delayed m sequence. A general solution of these problems is proposed, and a simplified method is given for the analysis of some delayed m sequences. Delayed m sequences with reciprocal polynomial are also discussed. (5 Refs)

Subfile: B

**30/7,K/5 (Item 5 from file: 35)**

DIALOG(R)File 35:Dissertation Abs Online  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
0995559 ORDER NO: AAD88-12684

**OPTICAL ARCHITECTURES FOR DIGITAL SIGNAL PROCESSING**

Author: ANTONY, SUSAMMA

Degree: PH.D

Year: 1988

Corporate Source/Institution: UNIVERSITY OF CINCINNATI (0045)

Source: VOLUME 49/05-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1858. 217 PAGES

Optical computing can be defined as the representation of information by photons and the use of optical devices for the parallel processing of one-dimensional or multidimensional data. Optical implementation requires significant **advances** in devices, identification of a suitable number system and encoding scheme to represent the data, and development of architectures and algorithms that can utilize the unique properties of

optics. The modified signed-digit (MSD) representation employed in the design of the architectures developed in this dissertation fully exploits the parallelism of optics. MSD representation satisfies the requirements of totally parallel addition/subtraction using modular or identical units and allows the addition/subtraction of any two numbers in two successive steps. Since MSD representation possess many advantages over the binary and residue number systems, MSD is identified as a better suitable number system for optical implementations. The MSD digits are coded using three linear states of polarization.

The two arithmetic units--the adder and the multiplier--are developed to form the basic building blocks of an optical computer. The adder performs the addition of two n-digit numbers in two stages compared to the n + 1 stages present in the n-digits 2's complement adder. Thus the MSD adder has significant advantages over the 2's complement adder. The optical multiplier eliminates the need for high speed analog-to-digital (A/D) converters, resulting in a higher throughput compared to the optical multipliers based on the DMAC algorithm.

The optical systolic FIR filter proposed here uses a barrel shifter-accumulator cell instead of the conventional multiplier-accumulator cell, thereby providing a speed-up in the throughput data rate along with a high degree of regularity and concurrency. An eight order FIR filter can be implemented using one liquid crystal light valve (LCLV) and one MSD adder.

The optical implementation of the median filter offers an increased throughput compared to the conventional electronic implementation by performing the median filtering operations as a set of binary median filtering operations, thus fully utilizing the parallelism offered by SSL and the massive parallelism of optics.

All the designs presented here are based on the principle of symbolic substitution. Certain implementation constraints associated with symbolic substitution logic (SSL) that were identified during this research and the solutions to overcome those constraints are also given.

30/7,K/8 (Item 8 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2004 Institution of Electrical Engineers. All rts. reserv.  
03944273 INSPEC Abstract Number: C91053410  
**Title: Julia sets of z from z/sup infinity /+c**  
Author(s): Vangala, N.; Gujar, U.G.; Bhavsar, V.C.  
Author Affiliation: Fac. of Comput. Sci., New Brunswick Univ.,  
Fredericton, NB, Canada  
Conference Title: CG International '90. Computer Graphics Around the  
World p.133-45  
Editor(s): Chua, T.S.; Kunii, T.L.  
Publisher: Springer-Verlag, Berlin, Germany  
Publication Date: 1990 Country of Publication: West Germany x+606 pp.  
ISBN: 3 540 70062 5  
Conference Sponsor: Inst. Syst. Sci  
Conference Date: 25-29 June 1990 Conference Location: Singapore  
Language: English Document Type: Conference Paper (PA)  
Treatment: Theoretical (T)  
Abstract: The fractal images generated from the generalized transformation function z from z/sup alpha /+c in the complex z-plane are analysed. The exponent alpha can assume any real or integer, either positive or negative, value. When the exponent alpha is a positive integer number, the fractal image has a lobular structure with the number of lobes equal to alpha . When alpha is a negative integer number the generated

fractal image has a planetary structure with a central planet and mod alpha mod satellite structures around it. When alpha is varied continuously between two consecutive integer numbers, continuous and predictable changes are observed between the two limiting fractal images. Some conjectures regarding the visual characteristics of the fractal images and the value of alpha are included. (7 Refs)

Subfile: C

**30/7,K/20 (Item 20 from file: 2)**

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

6624562 INSPEC Abstract Number: C2000-08-4240C-002

**Title: The train marshalling problem**

Author(s): Dahlhaus, E.; Horak, P.; Miller, M.; Ryan, J.F.

Author Affiliation: Dept. of Comput. Sci., Keln Univ., Germany

Journal: Discrete Applied Mathematics vol.103, no.1-3 p.41-54

Publisher: Elsevier,

Publication Date: 15 July 2000 Country of Publication: Netherlands

CODEN: DAMADU ISSN: 0166-218X

SICI: 0166-218X(20000715)103:1/3L.41:TMP;1-U

Material Identity Number: D066-2000-008

U.S. Copyright Clearance Center Code: 0166-218X/2000/\$20.00

Document Number: S0166-218X(99)00219-X

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P); Theoretical (T)

Abstract: The problem considered in this paper arose in connection with the rearrangement of railroad cars in China. In terms of sequences the problem reads as follows : Train Marshalling Problem: Given a partition S of {1,...,n} into disjoint sets S/sub 1/,...,S/sub t/, find the smallest number k=K(S) so that there exists a permutation p(1),..., p(t) of {1,...,t} with the property: The sequence of numbers 1, 2 ,...,n,1,2,...,n,...,1,2,...,n where the interval 1,2,...,n is repeated k times contains all the elements of S/sub p(1)/, then all elements of S/sub p(2)/,...,etc., and finally all elements of S/sub p(t)/. The aim of this paper is to show that the decision problem: "Given numbers n,k and a partition S of {1,2,...,n}, is K(S)<or=k?" is NP-complete. In light of this, we give a general upper bound for K(S) in terms of n. (5 Refs)

Subfile: C

Copyright 2000, IEE

**37/6/1 (Item 1 from file: 583)**

06102048

Kaibele tulevad uued 500-kroonised pangatahedad

ESTONIA: NEW 500 KROON BILLS IN CIRCULATION

13 Jan 1995

**37/6/2 (Item 2 from file: 583)**

02840056

GNL INSTALLS TWO LINX 5100 INK JET PRINTERS

UK - GNL INSTALLS TWO LINX 5100 INK JET PRINTERS

2 August 1989

**37/7,K/3 (Item 1 from file: 2)**

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

5384743 INSPEC Abstract Number: B9611-8520-055

**Title: Identification of current load graphs by using the connection function**

Author(s): Bikadorov, A.

Author Affiliation: Univ. of Transp., Rostov-on-Don, Russia

Conference Title: Second International Scientific Conference. Modern Supply Systems and Drives for Electric Traction. Conference Proceedings p.18-19

Publisher: Warsaw Univ. Technol, Warsaw, Poland

Publication Date: 1995 Country of Publication: Poland xiv+304 pp.

Material Identity Number: XX95-02337

Conference Title: Proceedings of 2nd International Conference on Modern Supply Systems and Drives for Electric Traction

Conference Sponsor: Ministr. Educ. Naradowej; Komitet Badan Naukowych; IEE; et al

Conference Date: 5-7 Oct. 1995 Conference Location: Warsaw, Poland

Availability: Warsaw University of Technology, El. Traction Group, 00-661 Warsaw, Plac Politechniki 1, Poland

Language: English Document Type: Conference Paper (PA)

Treatment: Theoretical (T)

Abstract: The necessity of identifying current load graphs arises when solving the tasks of the power supply, protection, analysis of the current locomotive graphs in coupled trains, and comparison of experimental results. It is necessary to know both the degree of statistical connection between the values of the random variable in its number sequence and between the numerical sequences of two random variables. Practical calculations show that the use of correlation functions in estimating the connection degree does not always give the idea of it. That is why the author proposes the special connection function for this aim. (1 Refs)

Subfile: B

Copyright 1996, IEE

**37/7,K/6 (Item 1 from file: 99)**

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

(c) 2004 The HW Wilson Co. All rts. reserv.

2077272 H.W. WILSON RECORD NUMBER: BAST99043092

**Pentium serial number pains privacy groups**

Geppert, Linda;

IEEE Spectrum v. 36 no6 (June 1999) p. 92

DOCUMENT TYPE: Feature Article ISSN: 0018-9235

ABSTRACT: The public relations controversy related to Intel's hardwiring of a unique serial number, accessible over the Internet and private networks, into every Pentium III chip continues. Intel says the feature is a way for organizations to enhance security and manage information and equipment. However, privacy groups were apoplectic and demanded that Intel disable the processor serial number immediately. A utility that the company developed to enable consumers' to control access to the number has turned out to be hackable.

**37/7,K/7 (Item 1 from file: 256)**

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

(c)2004 Info.Sources Inc. All rts. reserv.

00092981 DOCUMENT TYPE: Review

PRODUCT NAMES: Defender Windows NT 1.0 (303291)

**TITLE: Defender Security Server provides key to safe remote LAN access**

AUTHOR: Madden, Mary

SOURCE: InfoWorld, v18 n26 pN/2(1) Jun 24, 1996

ISSN: 0199-6649

Homepage: <http://www.infoworld.com>

RECORD TYPE: Review

REVIEW TYPE: Review

GRADE: A

Digital Pathways' now AssureNet Pathways' Defender **Security** Server for Windows NT (DSS/NT) 1.0, a recommended Windows NT **security** solution, is a good choice for organizations that need to **protect** corporate data linked to WANs or to which users remotely connect. Any company that has stringent and changeable **security** requirements can get benefits from DSS/NT. DSS/NT improves on RAS and other communications servers by, for example, requiring a one-time password useful only for a particular remote session. DSS/NT also offers a way to lock out further access attempts when a user- **set** **number** of **sequential** failed accesses is reached. Users can also be granted access to different **security** servers, which can be managed from a central management console, WinDMS. A full-functioned reporting tool allows users to create sophisticated reports of user violations and system usage. Users can choose between hardware tokens or software **security** options.

REVISION DATE: 20010330

DESCRIPTORS: Computer **Security** ; IBM PC & Compatibles; LANs; Network Software; Password **Protection** ; Remote Network Access; Windows NT/2000

File 15:ABI/Inform(R) 1971-2004/Jan 28  
File 9:Business & Industry(R) Jul/1994-2004/Jan 28  
File 610:Business Wire 1999-2004/Jan 28  
File 810:Business Wire 1986-1999/Feb 28  
File 476:Financial Times Fulltext 1982-2004/Jan 29  
File 624:McGraw-Hill Publications 1985-2004/Jan 28  
File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 29  
File 613:PR Newswire 1999-2004/Jan 29  
File 813:PR Newswire 1987-1999/Apr 30  
File 634:San Jose Mercury Jun 1985-2004/Jan 28  
Set Items Description  
S1 3206331 NUMBER??? OR NUMERAL? ? OR NUMERIC?  
S2 1019785 SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE-  
NT  
S3 6924486 DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?  
S4 1363389 ALTERNATE OR DIFFERENT  
S5 4999472 TWO  
S6 5565022 2  
S7 6819012 UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?-  
??  
S8 2737614 SECUR??? OR SURETY OR SAFEGUARD??? OR PROTECT???

S9 10602 S1(N) S2  
S10 13990 S1(2N) S2  
S11 46754 S1(2N) S3  
S12 28545 S1(2N) S4  
S13 42949 S1(2N) S5  
S14 30832 S1(2N) S6  
S15 342 S9(3N) S11:S14  
S16 12 S7(5N) S15  
S17 47 S7(S) S15  
S18 49 S8(S) S15  
S19 7 S17(S) S18  
S20 6 RD (unique items)  
**S21 6 Sort S20/ALL/PD,A**  
S22 10 S16 NOT S19  
S23 10 RD (unique items)  
S24 2 S23/2001:2004  
S25 8 S23 NOT S24  
**S26 8 Sort S25/ALL/PD,A**  
S27 5 S8(5N) S15  
S28 5 S27-NOT (S16 OR S19)  
**S29 5 RD (unique items)**  
S30 468 S10(3N) S11:S14  
S31 4 S30(5N) S7:S8 NOT (S16 OR S19 OR S27)  
**S32 4 RD (unique items)**

**21/8/4 (Item 4 from file: 9)**

DIALOG(R)File 9:(c) 2004 Resp. DB Svcs. All rts. reserv.  
1681826 Supplier Number: 01681826 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Thailand - AIS To Tackle Cellphone Fraud**  
December 05, 1996  
WORD COUNT: 234  
COMPANY NAMES: ADVANCED INFO SERVICE CO LTD (SHINAWATRA COMPUTER AND  
COMMUNICATIONS PUBLIC CO LTD)  
INDUSTRY NAMES: Mobile communications; Telecom services;

Telecommunications

PRODUCT NAMES: Cellular telephone services (481218)  
CONCEPT TERMS: All company; Corporate strategy  
GEOGRAPHIC NAMES: Southern & Eastern Asia (SSAX); Thailand (THA)

**21/3,K/1 (Item 1 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00366590 87-25424

**Confessions of a Bank Con Man**

Blank, Dennis  
Bankers Monthly v104n6 PP: 32-36 Jun 1987  
ISSN: 0005-5476 JRNL CODE: BKM

...ABSTRACT: foreign countries. Today, Abagnale is a leading authority on credit card fraud, bad checks, money- **changing** scams, and phony IDs. His multimillion-dollar-a-year business provides fail-safe **security** systems for major stores and banks. According to Abagnale, check deposit slips are of great...

... side is perforated. They should also learn to read the routing code in the 9 **consecutive numbers** inside 2 brackets at the bottom left-hand corner of the check.

**21/3,K/5 (Item 5 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
01914437 05-65429

**It ain't necessarily so**

Crossley, Frances; Warwick, Martyn  
Communications International v26n10 PP: 128-134 Oct 1999  
ISSN: 0305-2109 JRNL CODE: COI

WORD COUNT: 2172

...TEXT: a highly trained polecat are long since past.

Mobile data networks today operate numerous, complex **security** measures including user authentication, equipment identity registers, electronic **serial numbers**, closed user **groups** and over air message encryption. Illegal monitoring of radio transmissions on packetswitched networks is extremely...

... bursts are very short and the transmission frequencies of terminals on the move are constantly **changing**. Then, all data packets recorded would have, somehow, to be sorted so that data from...

**21/3,K/6 (Item 6 from file: 610)**

DIALOG(R)File 610:Business Wire  
(c) 2004 Business Wire. All rts. reserv.  
00139126 19991115319B1436 (USE FORMAT 7 FOR FULLTEXT)

**CRYPTOCARD Introduces Key Fob and Palm Tokens with CRYPTOAdmin 4.1**

Business Wire

Monday, November 15, 1999 09:11 EST

JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

DOCUMENT TYPE: NEWSWIRE

WORD COUNT: 850

...new user interface for CRYPTOAdmin 4.1 incorporates enhanced management and control capabilities for network **security** administrators. The nested groups feature makes it easy for entire departments, divisions, or business units of users to be quickly accommodated as organizations make **changes** to their **security** policy.

Administrators can now easily add more detailed user information and quickly find users by first or last name, department, or token **serial number**.

"Different users prefer different types of authentication tokens," said Dr. Tony Walker, CRYPTOCARD's vice president...

...devices, the KF-1 and the PT-1 offer the strongest level of access control **protection** in a form factor that many road warriors prefer. Furthermore, many internal users will like...

**26/8/5 (Item 5 from file: 636)**

DIALOG(R)File 636:(c) 2004 The Gale Group. All rts. reserv.  
03229761 Supplier Number: 46623073 (USE FORMAT 7 FOR FULLTEXT)

**AMENDMENT WOULD BLOCK RELOCATION**

August 12, 1996

Word Count: 5654

PUBLISHER NAME: Pasha Publications, Inc.

INDUSTRY NAMES: BUSN (Any type of business); OIL (Petroleum, Energy Resources and Mining)

**26/8/7 (Item 7 from file: 15)**

DIALOG(R)File 15:(c) 2004 ProQuest Info&Learning. All rts. reserv.  
01731481 03-82471

**Corporate-class Internet? Don't count on it! WORD COUNT: 6513**  
LENGTH: 13 Pages

Nov 1998

GEOGRAPHIC NAMES: US

DESCRIPTORS: Many companies; Internet service providers; Performance evaluation; Network hubs; Network operating systems; Connectivity

CLASSIFICATION CODES: 9190 (CN=United States); 8330 (CN=Broadcasting & telecommunications); 5320 (CN=Quality control); 5250 (CN=Telecommunications systems)

**26/8/8 (Item 8 from file: 636)**

DIALOG(R)File 636:(c) 2004 The Gale Group. All rts. reserv.  
04711532 Supplier Number: 63137153 (USE FORMAT 7 FOR FULLTEXT)

**Office of the Press Secretary -- To modify duty-free treatment under the generalized system of preferences and for other purposes.**

July 3, 2000

Word Count: 1888

PUBLISHER NAME: M2 Communications Ltd.

INDUSTRY NAMES: BUSN (Any type of business); INTL (Business, International)

**26/3,K/1 (Item 1 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.

00480074 90-05831

**Technophone MC 905A**

Howat, Faris

Cellular Business v7n1 PP: 72-76 Jan 1990

ISSN: 0741-6520 JRNL CODE: CLB

...ABSTRACT: simple and straightforward. The MC 905A has many convenient features, including: 1. display own phone **serial number**, 2. alpha search, 3. **change** personal identification number, 4. automatic redial, and 5. memory recall restriction. It differs from other...

**26/3, K/2 (Item 2 from file: 636)**  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.  
02707421 Supplier Number: 45491991 (USE FORMAT 7 FOR FULLTEXT)  
**COMSAT SUES GI**  
Television Digest, v35, n17, pN/A  
April 24, 1995  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 407  
... patent was issued in early 1980s, reissued in 1990. Conditional access systems apply logarithms to series of numerical sequences . Keys, which are updated monthly, are embedded in receivers and decoders to put signal back together.  
Comsat will determine...

**29/8/2 (Item 1 from file: 610)**  
DIALOG(R)File 610:(c) 2004 Business Wire. All rts. reserv.  
00559298 20010723204B9992 (USE FORMAT 7 FOR FULLTEXT)  
**Attorney General Appoints Identity Theft Team to Advance New Law**  
Monday, July 23, 2001 13:01 EDT  
WORD COUNT: 995  
COMPANY NAMES: SOCIAL SECURITY; FEDERAL TRADE COMMISSION  
GEOGRAPHIC NAMES: AMERICAS; NORTH AMERICA; USA; WASHINGTON  
INDUSTRY NAMES: CRIME; GOVERNMENT; INSTITUTIONS; LEGAL; LEGISLATION;  
SOCIAL ISSUES  
EVENT NAMES: CONTRACTS AND ORDERS; GOVERNMENT; LEGAL; ORGANISATIONS AND  
INSTITUTIONS

**29/8/3 (Item 2 from file: 610)**  
DIALOG(R)File 610:(c) 2004 Business Wire. All rts. reserv.  
00516815 20010509129B6824 (USE FORMAT 7 FOR FULLTEXT)  
**AG Alerts Consumers to New Law That Protects Their Good Names**  
Wednesday, May 9, 2001 12:35 EDT  
WORD COUNT: 1,265  
COMPANY NAMES: AG; FEDERAL TRADE COMMISSION; SOCIAL SECURITY  
INDUSTRY NAMES: CRIME; FRAUD; GOVERNMENT; INSTITUTIONS; JUDICIAL; LEGAL;  
LEGISLATION; PROPERTY CRIME; SOCIAL ISSUES  
EVENT NAMES: GOVERNMENT; LEGAL; SOCIAL ISSUES

**29/8/4 (Item 1 from file: 624)**  
DIALOG(R)File 624:(c) 2004 McGraw-Hill Co. Inc. All rts. reserv.  
0587093  
**Making More of Windows NT: A complete implementation of SVR4 Unix on Windows NT? Not exactly, but Portage is a good start**  
July, 1994  
Word Count: 1,430 \*Full text available in Formats 5, 7 and 9\*

**29/8/5 (Item 1 from file: 636)**  
DIALOG(R)File 636:(c) 2004 The Gale Group. All rts. reserv.  
04775400 Supplier Number: 65147599 (USE FORMAT 7 FOR FULLTEXT)  
**Consumers should guard against identity theft.**  
Sept 11, 2000  
Word Count: 1053  
PUBLISHER NAME: M2 Communications Ltd.  
INDUSTRY NAMES: BUSN (Any type of business); INTL (Business,

International)

**29/3,K/1 (Item 1 from file: 15)**  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00374671 87-33505  
**Computer Crime**  
Anonymous  
Industrial Management & Data Systems PP: 28-31 Jul/Aug 1987  
ISSN: 0263-5577 JRNL CODE: IDS  
...ABSTRACT: transfer networks may be protected by built-in hardware codes and restricted terminal use. Communication **security** may include: 1. message **sequence numbers**, 2 . the use of fiber optics for wide-band, high-speed data transmission to prevent wiretapping...

**32/8/1 (Item 1 from file: 15)**  
DIALOG(R)File 15:(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00867128 95-16520 \*\*USE FORMAT 9 FOR FULL TEXT\*\*  
**Why did economic models falsely predict a Bush landslide in 1992?**  
WORD COUNT: 3718 LENGTH: 8 Pages  
Apr 1994  
GEOGRAPHIC NAMES: US  
DESCRIPTORS: Economic models; Political campaigns; Presidency; Forecasting techniques; Effectiveness; Statistical analysis; Studies  
CLASSIFICATION CODES: 1130 (CN=Economic theory); 9550 (CN=Public sector); 9190 (CN=United States); 9130 (CN=Experimental/Theoretical)

**32/8/3 (Item 1 from file: 476)**  
DIALOG(R)File 476:(c) 2004 Financial Times Ltd. All rts. reserv.  
0010041093 B0JGABAAC4FT  
**THE AMERICAS: Bush smashes campaign fundraising records: NEWS DIGEST**  
Thursday, July 1, 1999  
Word Count: 166  
DESCRIPTORS: Economic Indicators; Government - Central; Sales  
GEOGRAPHIC NAMES: Canada (GC=CA)  
PRODUCT/INDUSTRY NAMES: Finance, Taxation, and Monetary Policy (SC=9311); General Government, NEC (SC=9199)

**32/8/4 (Item 2 from file: 476)**  
DIALOG(R)File 476:(c) 2004 Financial Times Ltd. All rts. reserv.  
0010041086 B0JGABAADAFT  
**US AND CANADA: Canada enjoys growth for nine months**  
Thursday, July 1, 1999  
Word Count: 349  
DESCRIPTORS: Economic Indicators; Government - Central.  
GEOGRAPHIC NAMES: Canada (GC=CA)  
PRODUCT/INDUSTRY NAMES: Administration of General Economic Programs (SC=9611)

**32/3,AB,K/2 (Item 1 from file: 810)**  
DIALOG(R)File 810:Business Wire  
(c) 1999 Business Wire . All rts. reserv.  
0323778 BW752  
**FDA TRACKING REGULATION: FDA tracking regulation will require manufacturers and distributors to keep precise records**  
March 10, 1993

Byline: Business Editors, Health/Medical Writers  
...data to manufacturers, it is still the  
manufacturers' responsibility to provide the FDA with the following :  
1. Manufacturer's identifier, including **serial number**, model  
**number**, or other tracking **number**.  
2 . The date the device was shipped.  
3. Patient information, including name, address, telephone  
number and...

File 275:Gale Group Computer DB(TM) 1983-2004/Jan 29  
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Jan 29  
File 16:Gale Group PROMT(R) 1990-2004/Jan 29  
File 160:Gale Group PROMT(R) 1972-1989  
File 148:Gale Group Trade & Industry DB 1976-2004/Jan 29  
File 20:Dialog Global Reporter 1997-2004/Jan 29  
Set Items Description  
S1 8132910 NUMBER??? OR NUMERAL? ? OR NUMERIC?  
S2 2582283 SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCE-  
SION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE-  
NT  
S3 17777739 DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?  
S4 3562706 ALTERNATE OR DIFFERENT  
S5 13765709 TWO  
S6 12833088 2  
S7 18044660 UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?-  
??  
S8 9641594 SECUR??? OR SURETY OR SAFEGUARD??? OR PROTECT???

S9 38618 S1(2N)S2  
S10 117669 S1(2N)S3  
S11 61420 S1(2N)S4  
S12 118528 S1(2N)S5  
S13 71654 S1(2N)S6  
S14 1076 S9(3N)S10:S13  
S15 28 S14(5N)S7  
S16 18 S14(5N)S8  
S17 0 S15(S)S16  
S18 46 S15:S16  
S19 35 RD (unique items)  
S20 12 S19/2001:2004  
S21 23 S19 NOT S20  
S22 23 Sort S21/ALL/PD,A

**22/8/2 (Item 2 from file: 148)**

DIALOG(R) File 148: (c) 2004 The Gale Group. All rts. reserv.  
04154584 SUPPLIER NUMBER: 08161645 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Drawings: toward a standard format. (P/A Practice)**  
Dec, 1989  
WORD COUNT: 1262 LINE COUNT: 00105  
INDUSTRY CODES/NAMES: ARCH Architecture and Design  
DESCRIPTORS: Architectural drawing--Standards; Construction industry--  
Standards  
SIC CODES: 8712 Architectural services; 1500 GENERAL BUILDING  
CONTRACTORS

**22/8/4 (Item 4 from file: 275)**

DIALOG(R) File 275:(c) 2004 The Gale Group. All rts. reserv.  
01467256 SUPPLIER NUMBER: 11744516 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Autocad tip. (using AutoCAD's Autolisp programming language to perform  
mathematical calculations) (Tutorial)**  
Dec, 1991  
WORD COUNT: 1758 LINE COUNT: 00129  
SPECIAL FEATURES: illustration; table  
DESCRIPTORS: Programming Language; Computer-Aided Design; Software  
Packages; Computer Arithmetic; Mathematical Programming; Functional  
Capabilities; Tutorial

SIC CODES: 7372 Prepackaged software  
TICKER SYMBOLS: ACAD  
TRADE NAMES: AutoCAD (CAD software)--Usage  
OPERATING PLATFORM: MS-DOS

**22/8/6 (Item 6 from file: 148)**

DIALOG(R)File 148:(c)2004 The Gale Group. All rts. reserv.  
05817361 SUPPLIER NUMBER: 12020738 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Counterfeit 10,000-Yen Notes Surface in Kobe**  
April 6, 1992  
WORD COUNT: 127 LINE COUNT: 00010  
INDUSTRY CODES/NAMES: BUS Business, General  
DESCRIPTORS: Japan. National Police Agency--Reports

**22/8/9 (Item 9 from file: 16)**

DIALOG(R)File 16:(c) 2004 The Gale Group. All rts. reserv.  
02904034 Supplier Number: 43920176 (USE FORMAT 7 FOR FULLTEXT)  
**Penetration of waterborne coatings into the automotive (OEM) industry**  
June 23, 1993  
Word Count: 2195  
PUBLISHER NAME: FMJ International Publications Ltd.  
EVENT NAMES: \*330 (Product information); 320 (Manufacturing processes)  
GEOGRAPHIC NAMES: \*4E (Europe)  
PRODUCT NAMES: \*2852311 (Motor Vehicle Coatings); 2850100 (Water Base Paint); 3711000 (Motor Vehicles)  
INDUSTRY NAMES: INTL (Business, International)  
NAICS CODES: 32551 (Paint and Coating Manufacturing); 33611 (Automobile and Light Duty Motor Vehicle Manufacturing)  
SPECIAL FEATURES: LOB

**22/8/13 (Item 13 from file: 16)**

DIALOG(R)File 16:(c) 2004 The Gale Group. All rts. reserv.  
05047219 Supplier Number: 47409145 (USE FORMAT 7 FOR FULLTEXT)  
**Royal Replacement Should Firm Up A310-300 Values**  
May 26, 1997  
Word Count: 235  
PUBLISHER NAME: Cowles-SIMBA Information  
COMPANY NAMES: \*Airbus Industrie; GECAS; Royal Airlines  
EVENT NAMES: \*430 (Capital expenditures); 613 (New orders received)  
GEOGRAPHIC NAMES: \*1CANA (Canada)  
PRODUCT NAMES: \*4510000 (Scheduled Airlines); 3721350 (Jumbo Jets)  
INDUSTRY NAMES: AERO (Aerospace and Defense); BUSN (Any type of business)  
NAICS CODES: 4811 (Scheduled Air Transportation); 336411 (Aircraft Manufacturing)  
TRADE NAMES: 727; A310; A310-300; L-1011  
SPECIAL FEATURES: INDUSTRY; COMPANY

**22/8/15 (Item 15 from file: 148)**

DIALOG(R)File 148:(c)2004 The Gale Group. All rts. reserv.  
11758061 SUPPLIER NUMBER: 56904682 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Improving roadways: performance graded asphalt binders.**  
Sept, 1997  
WORD COUNT: 1827 LINE COUNT: 00156  
DESCRIPTORS: Asphalt--Additives; Asphalt industry--Standards  
PRODUCT/INDUSTRY NAMES: 2899549 (Binders & Hardeners NEC)  
SIC CODES: 2899 Chemical preparations, not elsewhere classified

NAICS CODES: 325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing

**22/8/16 (Item 16 from file: 16)**

DIALOG(R)File 16:(c) 2004 The Gale Group. All rts. reserv.  
07370630 Supplier Number: 59545626 (USE FORMAT 7 FOR FULLTEXT)  
**THE OFFICIAL UK CHARTS.**

Dec 6, 1997

Word Count: 1113

PUBLISHER NAME: Miller Freeman UK Ltd

EVENT NAMES: \*240 (Marketing procedures)

GEOGRAPHIC NAMES: \*4EUUK (United Kingdom)

PRODUCT NAMES: \*3652000 (Records & Tapes)

INDUSTRY NAMES: ARTS (Arts and Entertainment); BUSN (Any type of business)

SIC CODES: 3652 (Prerecorded records and tapes)

NAICS CODES: 51222 (Integrated Record Production/Distribution)

SPECIAL FEATURES: LOB

ADVERTISING CODES: 85 Industry Market Data; 82 Geographic

**22/8/18 (Item 18 from file: 20)**

DIALOG(R)File 20:(c) 2004 The Dialog Corp. All rts. reserv.  
04255280 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Fake notes on the increase, police warn**

February 06, 1999

WORD COUNT: 356

DESCRIPTORS: Crimes; General News; Money Supply; Economic Indicators;  
Economic News

COUNTRY NAMES/CODES: Hong Kong (HK)

REGIONS: Asia; Far East

SIC CODES/DESCRIPTIONS: 9221 (Police Protection)

**22/8/21 (Item 21 from file: 20)**

DIALOG(R)File 20:(c) 2004 The Dialog Corp. All rts. reserv.  
12588880 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Bidder claims rigging in woodpole deal**

SECTION TITLE: General News

August 29, 2000

WORD COUNT: 752

DESCRIPTORS: Contracts & New Orders; Company News

COUNTRY NAMES/CODES: Philippines (PH)

REGIONS: Asia; Pacific Rim; South East Asia

**22/3,K/1 (Item 1 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01287451 SUPPLIER NUMBER: 07324283 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Save the display. (recording and renewing screen appearance) (1-2-3 Macros)  
(column)**

Gasteiger, Daniel

Lotus, v5, n2, p26(4)

Feb, 1989

DOCUMENT TYPE: column ISSN: 8756-7334 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 2904 LINE COUNT: 00214

... numbers in a column. There are times, however, when I need to fill

in evenly sequenced numbers between two numeric endpoints. I use the following macro:

To try the macro, enter labels as shown and select \Range Name Labels. Right...

**22/3,K/3 (Item 3 from file: 621)**

DIALOG(R)File 621:Gale Group New Prod.Annou. (R)

(c) 2004 The Gale Group. All rts. reserv.

01174002 Supplier Number: 42374255 (USE FORMAT 7 FOR FULLTEXT)

**TRW SHIPS SECOND GENERATION FAX ENCRYPTOR**

News Release, pl

Sept 20, 1991

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 636

...encryptor includes an Authentication Banner noting the date and time the message was received, a "Secure" stamp, and the serial number or group code of the sending encryptor.

A Transaction Journal report summarizes the date and times of...

**22/3,K/7 (Item 7 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01513946 SUPPLIER NUMBER: 12139412 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Generating unique IDs: using PAL to generate primary keys when a unique identifier is needed in your application. (Speaking of Paradox) (column) (Tutorial)**

Ehrmann, Dan

DBMS, v5, n5, p22(3)

May, 1992

DOCUMENT TYPE: Tutorial ISSN: 1041-5173 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 2266 LINE COUNT: 00166

... in the key field is the necessary portions of the last name and first name, followed by the sequence number padded to two characters. For the sequence numbers of one through nine, the Fill() function is used to generate a leading zero. For...

**22/3,K/4 (Item 4 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01467256 SUPPLIER NUMBER: 11744516 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Autocad tip. (using AutoCAD's Autolisp programming language to perform mathematical calculations) (Tutorial)**

McCarthy, Tim

Cadcam, v10, n12, p23(2)

Dec, 1991

DOCUMENT TYPE: Tutorial ISSN: 0963-5750 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1758 LINE COUNT: 00129

... in Autolisp.

A 2D point in autocad is the same as an Autolisp list containing two numbers. The following sequence uses SETQ and a new function, List, to generate a point. This point is then...

**22/3,K/8 (Item 8 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.  
01546871 SUPPLIER NUMBER: 12631915 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Streamline your program's setup with the version control and decompression DLLs. (dynamic link libraries) (Tutorial)**  
Richter, Jeffrey  
Microsoft Systems Journal, v7, n6, p61(11)  
Oct, 1992  
DOCUMENT TYPE: Tutorial ISSN: 0889-9932 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 6764 LINE COUNT: 00540  
... of variable information, Translation. This section describes which languages are supported by the file. A **sequence of number pairs follows** the "Translation" string. In the VERSIONINFO resource in Figure 4, the first number in the...

**22/3,K/10 (Item 10 from file: 275)**  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.  
01676899 SUPPLIER NUMBER: 15320782 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
NLSP supplants RIP/SAP; protocol will cut WAN background traffic. (NetWare Link Services Protocol; routing information protocol/service advertising protocol) (includes brief related articles on interoperability, protocols) (PC Week/Netweek)

Katz, William F.  
PC Week, v11, n15, pN1(2)  
April 18, 1994  
ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1002 LINE COUNT: 00079  
... an expired LSP is flooded and the Link State database is updated to reflect the **change**.  
The last packet type, the **Sequence Number** packet, has **two** variants -- the Partial **Sequence Number** packet and the CSNP (Complete Sequence Number packet).  
As stated earlier, changes in the network...

**22/3,K/14 (Item 14 from file: 275)**  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.  
02094160 SUPPLIER NUMBER: 19698371  
**Inside run states. (Technology Tutorial) (Tutorial)**  
Henry, S. Lee  
SunExpert, v8, n8, p36(4)  
August, 1997  
DOCUMENT TYPE: Tutorial ISSN: 1053-9239 LANGUAGE: English  
RECORD TYPE: Abstract  
...ABSTRACT: in /etc/rc directories start with an S for start or a K for kill **followed** by a **two -digit sequence number**. There are several higher-level scripts run only by init, under which there are as...

**22/3,K/17 (Item 17 from file: 148)**  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.  
11581849 SUPPLIER NUMBER: 21201428 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Wireless system offers long range field testing capability. (SoMat Corp. offers new wireless modem system)**

Diesel Progress North American Edition, v64, n6, p130(2)  
June, 1998

LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 809 LINE COUNT: 00069

... which extends the range and allows two repeaters to be used in a link; factory- **set serial number** for data security; and on-board qualitative and quantitative RF diagnostics for easy field troubleshooting  
...

**22/3,K/19 (Item 19 from file: 20)**

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts. reserv.  
09646072 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Export Promotion Bureau detects textile quota fraud by three firms**

MUZAFFAR QURESHI

BUSINESS RECORDER

February 20, 2000

JOURNAL CODE: WBRE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 878

... the export licences were forged and prepared on new set of export licence forms containing **different machine serial numbers** as given by Pakistan **Security** Printing Corporation. To investigate the matter and unearth the persons behind this forgery, the Export...

**22/3,K/22 (Item 22 from file: 20)**

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts. reserv.  
12781004 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Texas A&M University: Consumers should guard against identity theft**

M2 PRESSWIRE

September 11, 2000

JOURNAL CODE: WMPR LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 1037

... your mother's maiden name, your birth date, the last four digits of your Social **Security** Number or your phone **number**, or a **series of consecutive numbers** for a password or Personal Identification Number.

-- If you have a reason to believe that...

**22/3,K/23 (Item 23 from file: 20)**

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts. reserv.  
13131332 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**FIGURING IT OUT with Robin Stewart**

WESTERN MORNING NEWS , Cornish Guardian (all) ed, p19

September 28, 2000

JOURNAL CODE: FWMN LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 598

... of coursework.

- This month's puzzle is to find a rule for each of the **following two number sequences**.

1. 2 ,5,8,11,14,17,.....
2. 2,5,10,17,26,37,..... You can e...

File 625:American Banker Publications 1981-2004/Jan 29  
File 80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jan 28  
File 635:Business Dateline(R) 1985-2004/Jan 28  
File 47:Gale Group Magazine DB(TM) 1959-2004/Jan 28  
File 268:Banking Info Source 1981-2004/Jan W3  
File 626:Bond Buyer Full Text 1981-2004/Jan 29  
File 267:Finance & Banking Newsletters 2004/Jan 26  
File 608:KR/T Bus.News. 1992-2004/Jan 29

Set	Items	Description
S1	1390832	NUMBER??? OR NUMERAL? ? OR NUMERIC?
S2	444114	SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE- NT
S3	2647257	DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?
S4	782535	ALTERNATE OR DIFFERENT
S5	2508793	TWO
S6	2063136	2
S7	2551766	UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?- ??
S8	1063829	SECUR??? OR SURETY OR SAFEGUARD??? OR PROTECT???
S9	6893	S1(2N)S2
S10	24960	S1(2N)S3
S11	12772	S1(2N)S4
S12	17775	S1(2N)S5
S13	10773	S1(2N)S6
S14	261	S9(3N)S10:S13
S15	37	S14(S)S7
S16	28	S14(S)S8
S17	7	S15 AND S16
S18	7	RD (unique items)
S19	2	S18/2001:2004
S20	5	<b>S18 NOT S19</b>
S21	51	S15:S16 NOT S17
S22	48	RD (unique items)
S23	7	S22/2001:2004
S24	41	S22 NOT S23
S25	41	<b>Sort S24/ALL/PD,A</b>

**20/8/5 (Item 1 from file: 608)**

DIALOG(R)File 608:(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.

06641516 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Akron Beacon Journal, Ohio, Net Rider Column**

March 01, 1999

WORD COUNT: 512

COMPANY NAMES: Akron Beacon Journal ; Ameritech ; Beacon Journal ; Knight Ridder/Tribune Business News ; Modern ; Social Security ; Visit Akron Beacon Journal Online

DESCRIPTORS: Internet/Online

**20/3,K/1 (Item 1 from file: 625)**

DIALOG(R)File 625:American Banker Publications

(c) 2004 American Banker. All rts. reserv.

0178544

**Pru Takes Different View on Dollar Rolls**

Insurance Accountant - February 19, 1996; Pg. 1; Vol. 6, No. 7

DOCUMENT TYPE: Newsletter LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 721

TEXT:

...securitizations, with a strong endorsement of the requirement that in dollar rolls the exact same **security** must be returned to qualify for financing treatment.

This stance is contrary to much of...

...the effort to distinguish transfers of financial assets that are sales from transfers that are **secured** borrowings," said Michael Castrilli, vice president for accounting at Prudential Investment Co. "We strongly agree with the proposed statement's position with regard to **secured** borrowings insofar as the borrower must receive back the identical **security** in the transaction in order to qualify for financing treatment."

Current industry practice, based on...

...to be returned, Castrilli noted. But he argued that this practice "can lead to a **change** in the risk and benefits vis-a-vis the original asset held."

Because of this...

...group of securities, all must be identical in order to qualify the transaction as a **secured** borrowing."

This is decidedly a minority view within the insurance industry.

"Focusing on the CUSIP..."

...Fred P. Hauser, senior vice president and controller at MetLife. "When an entity exchanges a **security** for a 'substantially similar **security**,' we do not believe that an event of economic substance has occurred, and, therefore, a..."

...draft could actually lead to more gamesmanship. "An entity could exchange its MBS (mortgage backed **security**) portfolio through a dollar repurchase agreement and recognize desired gains or losses even though the..."

...on the FASB proposal echoed the form vs. substance argument.

"The fact that an identical **security** is not returned is no different than a repurchase agreement transaction in which the borrower...  
...at The Equitable.

Under such circumstances, the lender collects the collateral and buys a replacement **security**, he said. "If a repurchase agreement transaction where the identical asset may not be returned..."

...or whether it receives a substantially similar dollar back (i.e. a dollar with a **different serial number** than the dollar loaned)."

"We support the FASB's effort to clarify and eliminate inconsistencies..."

...sale treatment would not be appropriate since control has been maintained as the exact same **security** is returned and that such a transaction is, in fact, assuredly temporary," he said.

20/3,K/4 (Item 1 from file: 268)

DIALOG(R)File 268:Banking Info Source  
(c) 2004 ProQuest Info&Learning. All rts. reserv.

00140427

**Security and its implications**

Anonymous

Funds Transfer Report, p2-4, Jan 2, 1987 DOCUMENT TYPE: Newsletter  
Article LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: Encryption and authentication are important aspects of **security** in electronic networks. Data sent electronically is subject to passive listening in and attempts to **change** the data, unless **security** measures are set up. **Serial numbering** of messages is a simple technique that helps ensure that the same message is not...

...data transmitted electronically may be subject to "hackers and tappers" who listen to and/or change the data and learn financial strategy or commit fraud. Sheer volume of data and of...

**25/8/3 (Item 3 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
02670079 SUPPLIER NUMBER: 03621471 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The first of a breed; Christian Sharp's rifles helped tame America's wild frontier and put the breechloader in business for keeps.**

Feb, 1985

WORD COUNT: 1878 LINE COUNT: 00140  
SPECIAL FEATURES: illustration; photograph  
DESCRIPTORS: Sharps rifle--History; Gunsmiths--Biography; Rifles--History  
BIOGRAPHEE: Sharp, Christain--Biography

**25/8/4 (Item 4 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
02668136 SUPPLIER NUMBER: 03621405 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Glimmers of hope; the sagging micro software market may get a shot in the arm as vendors cobble up multi-user packages for networking.**

Feb 1, 1985

WORD COUNT: 1755 LINE COUNT: 00139  
COMPANY NAMES: Microsoft Corp.--Management  
DESCRIPTORS: InfoCorp.--Reports; Microcomputers--Computer programs;  
Computer software industry--Management; Local area networks--Computer  
programs  
NAMED PERSONS: Lefkowits, Bob--Attitudes; Nikora, Leo--Attitudes  
SIC CODES: 7372 Prepackaged software

**25/8/6 (Item 6 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
02802168 SUPPLIER NUMBER: 04199240 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Sacco and Vanzetti: the case resolved. (book reviews)**

April 7, 1986

WORD COUNT: 2953 LINE COUNT: 00234  
DESCRIPTORS: Books--Reviews; Sacco-Vanzetti case--Bibliography  
REVIEWEE: Russell, Francis  
GRADE: A

**25/8/7 (Item 7 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
03019476 SUPPLIER NUMBER: 06008089 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**More fax in your future. (Related articles: Fax speeds orders for parts distributor. Flexible deliveries due to fax.)**

Sept, 1987

WORD COUNT: 2165 LINE COUNT: 00173  
SPECIAL FEATURES: illustration; photograph

**25/8/12 (Item 12 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
03148173 SUPPLIER NUMBER: 06959457 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**PC support thrives via remote control. (buyers guide)**

Sept 5, 1988

WORD COUNT: 1882 LINE COUNT: 00145  
SPECIAL FEATURES: illustration; table  
DESCRIPTORS: Connectivity--Computer programs; Software--Maintenance and

repair

SIC CODES: 7372 Prepackaged software

**25/8/13 (Item 13 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
03161343 SUPPLIER NUMBER: 07017645 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**As the word turns. (word processing for the Macintosh) (Software Review)**  
**(evaluation)**

Nov, 1988

WORD COUNT: 1862 LINE COUNT: 00141

SPECIAL FEATURES: illustration; photograph

COMPANY NAMES: WordPerfect Corp.--Products; Microsoft Corp.--Products;  
Ann Arbor Softworks Inc.--Products; Claris Corp.--Products; MindWork  
Software--Products; T/Maker Co.--Products

DESCRIPTORS: Word processing software--Evaluation

SIC CODES: 7372 Prepackaged software

TICKER SYMBOLS: MSFT; AAPL

TRADE NAMES: Apple Macintosh (680X0-based system)--evaluation; FullWrite  
Professional (Word processing software)--evaluation; MindWrite 2.0 (Word  
processing software)--evaluation; Microsoft Word 3.02 (Word processing  
software)--evaluation; WordPerfect for Macintosh 1.0.1 (Word processing  
software)--evaluation; WriteNow 2.0 (Word processing software)--  
evaluation; Microsoft Write (Word processing software)--evaluation;  
MacWrite 5.0 (Word processing software)--evaluation

**25/8/14 (Item 14 from file: 635)**

DIALOG(R)File 635:(c) 2004 ProQuest Info&Learning. All rts. reserv.

0106141 89-30034

**Plane-BUILDER'S DREAM NEVER QUITE TAKES OFF**

PUBL DATE: 890821

WORD COUNT: 993

DATELINE: Billings, MT, US

CLASSIFICATION CODES: 8680 (Transportation equipment industry); 2130  
(Executives)

DESCRIPTORS: Aircraft industry; Entrepreneurs; Product testing; Industrial  
plants; Personal profiles; Educators; Mountain

NAMED PERSONS: Green, A. B.; Schlaht, John; Larson, Larry

SPECIAL FEATURE: Photo

**25/8/21 (Item 21 from file: 608)**

DIALOG(R)File 608:(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.

00151893 Story Number: 11959 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**CABLE TELEVISION INDUSTRY TRIES TO TUNE MINDSETS, TV SETS TO HIGH-TECH**

June 14, 1993

WORD COUNT: 1380

**25/8/23 (Item 23 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.

04127200 SUPPLIER NUMBER: 15604901 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**The Brickyard 400, a race to remember: stock cars race at the Indianapolis  
Motor Speedway. (includes related article)**

August, 1994

WORD COUNT: 1601 LINE COUNT: 00113

SPECIAL FEATURES: illustration; photograph

DESCRIPTORS: Stock car racing--Competitions; Indianapolis Motor Speedway  
--Competitions

**25/8/25 (Item 25 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
04633241 SUPPLIER NUMBER: 17446858 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Crystal structure of the MATalpha1/MATalpha2 homeodomain heterodimer bound to DNA.**

Oct 13, 1995

WORD COUNT: 6410 LINE COUNT: 00490  
SPECIAL FEATURES: illustration; table; chart  
DESCRIPTORS: DNA binding proteins--Research; Crystallography--Research;  
Genetic transcription--Research

**25/8/27 (Item 27 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
04509912 SUPPLIER NUMBER: 18289431 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**U.S. periodical price index for 1996.**

May, 1996

WORD COUNT: 2483 LINE COUNT: 00198  
SPECIAL FEATURES: illustration; table  
DESCRIPTORS: Periodicals--Prices and rates; Periodical publishing--Prices and rates; Library materials--Prices and rates

**25/8/29 (Item 29 from file: 608)**

DIALOG(R)File 608:(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.  
555822 Story Number: 9573 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**BOND EXPERT OFFERS ADVICE FOR BOND OWNERS**

Apr 17, 1997

WORD COUNT: 0342  
COMPANY NAMES: Federal Reserve Banks ; Knight Ridder/Tribune Business News  
DESCRIPTORS: Banking, Economy, Personal Finance, Stocks

**25/8/31 (Item 31 from file: 47)**

DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
05214708 SUPPLIER NUMBER: 20297341 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Visual access tools for special collections.**

Sep, 1997

WORD COUNT: 4332 LINE COUNT: 00365  
DESCRIPTORS: Cataloging of special collections in libraries--Computer programs

**25/8/32 (Item 32 from file: 80)**

DIALOG(R)File 80:(c) 2004 The Gale Group. All rts. reserv.  
01397649 Supplier Number: 48190714 (USE FORMAT 7 FOR FULLTEXT)  
**French Minetac update set for Turkish minehunters**

Dec 22, 1997

Word Count: 677

PUBLISHER NAME: King Publishing

COMPANY NAMES: \*DCN Ruelle

EVENT NAMES: \*960 (International politics); 330 (Product information)

GEOGRAPHIC NAMES: \*7TURK (Turkey)

PRODUCT NAMES: \*3662574 (Anti-Mine Sonar)

INDUSTRY NAMES: AERO (Aerospace and Defense); BUSN (Any type of business)

NAICS CODES: 334511 (Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing)

TRADE NAMES: Minetac

**25/8/34 (Item 34 from file: 635)**  
DIALOG(R)File 635:(c) 2004 ProQuest Info&Learning. All rts. reserv.  
0985018 99-47853  
**\$5M glides into fraud software firm**  
PUBL DATE: 980911  
WORD COUNT: 731  
DATELINE: Austin, TX, US, Southwest  
COMPANY NAMES: Infoglide Corp, Austin, TX, US, SIC:7372,  
CLASSIFICATION CODES: 8302 (Software and computer services); 7500 (Product  
planning & development)  
DESCRIPTORS: Software industry; Insurance fraud; Funding; Product  
development; Corporate profiles  
SPECIAL FEATURE: Photo

**25/8/35 (Item 35 from file: 47)**  
DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
05301362 SUPPLIER NUMBER: 53588590 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Chromosome 2 Sequence of the Human Malaria Parasite Plasmodium falciparum.**  
Nov 6, 1998  
WORD COUNT: 5905 LINE COUNT: 00556  
DESCRIPTORS: Plasmodium falciparum--Research; Malaria--Research

**25/8/39 (Item 39 from file: 80)**  
DIALOG(R)File 80:(c) 2004 The Gale Group. All rts. reserv.  
01434050 Supplier Number: 54615135 (USE FORMAT 7 FOR FULLTEXT)  
**Engine Values Remain Solid.**  
May 10, 1999  
Word Count: 571  
PUBLISHER NAME: Cowles-SIMBA Information  
EVENT NAMES: \*740 (Commodity & service prices)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*3724000 (Aircraft Engines & Parts)  
INDUSTRY NAMES: AERO (Aerospace and Defense); BUSN (Any type of business)  
NAICS CODES: 336412 (Aircraft Engine and Engine Parts Manufacturing)

**25/8/40 (Item 40 from file: 80)**  
DIALOG(R)File 80:(c) 2004 The Gale Group. All rts. reserv.  
01457939 Supplier Number: 60897656 (USE FORMAT 7 FOR FULLTEXT)  
**The Custom Handguns Of D&L Sports. (Brief Article)**  
May, 2000  
Word Count: 1662  
PUBLISHER NAME: Publishers' Development Corporation  
COMPANY NAMES: \*D and L Sports  
EVENT NAMES: \*330 (Product information)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*3484230 (Pistols & Revolvers)  
INDUSTRY NAMES: BUSN (Any type of business)  
SIC CODES: 3484 (Small arms)  
NAICS CODES: 332994 (Small Arms Manufacturing)  
ADVERTISING CODES: 57 New Products/Services

**25/8/41 (Item 41 from file: 47)**  
DIALOG(R)File 47:(c) 2004 The Gale group. All rts. reserv.  
05807722 SUPPLIER NUMBER: 62498237 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Home Wired Home. (News Briefs)**

June, 2000  
WORD COUNT: 5684 LINE COUNT: 00566

**25/3,K/1 (Item 1 from file: 47)**

DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
02365133 SUPPLIER NUMBER: 02781690 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Georg Cantor and the origins of transfinite set theory.**

Dauben, Joseph W.

Scientific American, v248, p122(10)

June, 1983

CODEN: SLAMA DOCUMENT TYPE: biography ISSN: 0036-8733

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 7622 LINE COUNT: 00582

... roots are irrational.) Because the legitimacy of the rational numbers was not in question, Cantor followed an approach suggested by Karl Weierstrass, one of his former teachers at the University of Berlin. Cantor proposed that any irrational number could be represented by an infinite sequence of rational numbers. The number square root 2, for example, can be represented by the infinite sequence of rational numbers 1, 1.4...

**25/3,K/2 (Item 2 from file: 47)**

DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
02512043 SUPPLIER NUMBER: 03143580 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**A switching-hitting portable. (evaluation)**

Smith, Stephen P.

PC Magazine, v3, p243(5)

Feb 21, 1984

DOCUMENT TYPE: evaluation LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 3194 LINE COUNT: 00246

... The problem lies in how powerful the Options program really is. In addition to changing the display format, it specifies the system RAM size, sets the number of serial and parallel ports, and alters the color palettes. Options also allows permanent redirection of printer...

**25/3,K/5 (Item 5 from file: 47)**

DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
02672143 SUPPLIER NUMBER: 00594837 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Legal Equalizers.**

Harris, T.

PC Magazine, v4, n3, p299

Feb.5, 1985

DOCUMENT TYPE: evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1099 LINE COUNT: 00085

... covers the main points. Coded Copying

Although you can duplicate the program disks, the copy-protection scheme requires that you contact the publisher to obtain a code number during the initial...

...number, which seems to be a combination of your firm name and the program's serial number, is different for each user. And because the firm name appears on most printouts, there is little...

**25/3,K/8 (Item 8 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03007012 SUPPLIER NUMBER: 05171697 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Business communications. (special advertising section)**  
Evans, Sherli; Menkus, Belden; Portway, Patrick  
Industry Week, v234, pBC1(11)  
Sept 7, 1987  
CODEN: IWEAA ISSN: 0039-0895 LANGUAGE: ENGLISH RECORD TYPE:  
FULLTEXT  
WORD COUNT: 5385 LINE COUNT: 00439  
... by thermal transfer or laser; memory for storing telephone numbers; polling for lowest phone rates; security mail boxes for classified information; automatic dialing; alternate phone number options; unattended sequential polling; and Group IV upgrade capability. Xerox Corporation, Rochester, NY, believes that plain paper is...

**25/3,K/9 (Item 9 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03020064 SUPPLIER NUMBER: 06142980 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Mainframe world is secure without copy protection. (Section 2: Connectivity) (column)**  
Mohen, Joe  
PC Week, v4, n47, pC6(1)  
Nov 24, 1987  
DOCUMENT TYPE: column ISSN: 0740-1604 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT  
WORD COUNT: 809 LINE COUNT: 00060  
... software were used, it would be detected eventually.  
It is also very easy to copy protect a mainframe-software package. Each IBM host has a serial number set into the hardware that cannot be altered. A user program can issue an Assembler language...

**25/3,K/10 (Item 10 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03083729 SUPPLIER NUMBER: 06553233 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Paradox. (Software Review) (one of 43 evaluations of programmable relational database managers) (evaluation)**  
Poor, Alfred  
PC Magazine, v7, n9, p209  
May 17, 1988  
DOCUMENT TYPE: evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1429 LINE COUNT: 00107  
... as seven 3-1/2-inch disks in the same package.  
Paradox is not copy protected, but you must initialize the program with the package serial number--which, paradoxically, is not the serial number on the label of the package! Paradox programs have two serial numbers, and it took a while for me to realize that the real one was hiding...

**25/3,K/11 (Item 11 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.

03146659      SUPPLIER NUMBER: 06736277      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Projects between the sheets. (Microsoft Excel as a database manager)  
(includes related article on using Excel macro capabilities)

Elam, Sandra  
MacUser, v4, n7, p234(8)  
July, 1988  
ISSN: 0884-0997      LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 4943      LINE COUNT: 00374  
... new lines to the database, remember to renumber your Sequence  
Number column with a new **sequential series** of **numbers** (using the  
**SERIES** command). Doing this will assign new sequence numbers to some of  
the requirements each time the database is **updated**. If you want to keep  
the same sequence numbers throughout the life of a project...  
...for deleted requirements. This kind of numbering scheme can lead to  
problems, though, as the **following** example illustrates.

In the hair-dryer database, suppose you add two new requirements to  
the...

25/3,K/15      (Item 15 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03387454      SUPPLIER NUMBER: 08261980      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**ProfitWISE. (Software Review) (one of five evaluations of low-end**  
**accounting software) (TLB Inc.) (evaluation)**  
August, Raymond A.; Jicha, Barbara; Reed, David; White, Thomas  
PC Magazine, v9, n7, p223(3)  
April 10, 1990  
DOCUMENT TYPE: evaluation      ISSN: 0888-8507      LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 833      LINE COUNT: 00068  
... if sufficient quantities of items are unavailable, back orders are  
created.

The Inventory module automatically **updates** the general ledger and  
calculates cost of goods sold. The inventory master files allow you to  
define up to three warehouse locations, register lot or **serial numbers**,  
and maintain **two** suppliers and part numbers per item. The inventory trial  
balance maintains an excellent detail listing...

25/3,K/16      (Item 16 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03456983      SUPPLIER NUMBER: 08680674      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**XcelleNet 1.2 provides WAN connections. (Software Review) (OS/2-based**  
**networking software) (evaluation)**  
Fratus, John; Graeff, Alan; Preuss, Don  
PC Week, v7, n30, p87(2)  
July 30, 1990  
DOCUMENT TYPE: evaluation      ISSN: 0740-1604      LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1780      LINE COUNT: 00139  
... network -- data transfer and E-mail.

The Network Manager portion of the product is **copy-protected** and  
requires a hardware key attached to the parallel port of the computer. The  
X/Node software is not **copy-protected**, but will not operate with a copy  
of Network Manager that has a **different serial number**.

XcelleNet Inc. introduced three new optional software modules with

Serial 09//693563

January 29, 2004

XcelleNet 1.2. X/Workstation, priced...

**25/3,K/17 (Item 17 from file: 47)**

DIALOG(R)File 47:Gale Group Magazine DB(TM)

(c) 2004 The Gale group. All rts. reserv.

03608875 SUPPLIER NUMBER: 10895208 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**DOS 5.0 (Microsoft Corp.'s improved operating system) (includes related articles on DOS 5.0 for Windows and on DOS 5.0 and Norton Utilities 6.0) (part 1) (Cover Story)**

Somerson, Paul

PC-Computing, v4, n7, p97(17)

July, 1991

DOCUMENT TYPE: Cover Story ISSN: 0899-1847

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 7717 LINE COUNT: 00570

... invoked.

COMMAND.COM stores the INT 10 instruction in a sort of shorthand notation as **two successive hex numbers**, CD 10. To find this pair of hex numbers, first use DEBUG'S RCX command...

...the Enter key twice to tell DEBUG you want to look at the length, not **change it**). Next, use the DEBUG S command to start searching from the beginning of the...

**25/3,K/18 (Item 18 from file: 635)**

DIALOG(R)File 635:Business Dateline(R)

(c) 2004 ProQuest Info&amp;Learning. All rts. reserv.

0227372 91-50372

**16 Charged in Computer Racketeering**

Edelman, Lawrence

Boston Globe (Boston, MA, US), V240 N17 s1 p1

PUBL DATE: 910717

WORD COUNT: 1,005

DATELINE: Boston, MA, US

TEXT:

...worth of the stolen parts were shipped to a California computer parts company, The Moore **Group**, where **serial numbers** were **changed** and other modifications made before they were resold. Another \$2.2 million in gear was...

**25/3,K/19 (Item 19 from file: 635)**

DIALOG(R)File 635:Business Dateline(R)

(c) 2004 ProQuest Info&amp;Learning. All rts. reserv.

0237904 91-61790

**Cellular Glitch Enables Crooks to Call for Free**

Urlocker, Mike

Financial Post (Toronto, ONT, Canada), V4 N121 s1 p32

PUBL DATE: 910903

WORD COUNT: 655

DATELINE: Toronto, ONT, Canada

TEXT:

... The most prevalent method is called "tumbling" because the modified phone tumbles through a **different**, illegitimate **serial number** for each call. Tumblers prey upon a weakness in cellular **security** systems that allows out-of-town visitors to use their phones in territories served by...

**25/3,K/20 (Item 20 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03807139 SUPPLIER NUMBER: 13218058 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Why cybercrooks love cellular. (cellular telephones provide opportunity for telephone criminals)**  
Flanagan, William G.; McMenamin, Brigid  
Forbes, v150, n14, p189(1)  
Dec 21, 1992  
ISSN: 0015-6914 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 524 LINE COUNT: 00039  
...ABSTRACT: because at the moment it is impossible to prevent these crimes. Each cellular telephone has two identifying numbers, called an electronic serial number (ESN) and a mobile identification number (MIN), for billing and verification. The two methods for criminals to use the numbers are tumbling and cloning. Tumbling uses a personal computer to change the numbers after each call. Cellular telephones are by nature mobile, and calls made from...

**25/3,K/22 (Item 22 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
04034260 SUPPLIER NUMBER: 14621628 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Q&A. (question-and-answer) (includes related article)**  
PC-Computing, v7, n1, p270(2)  
Jan, 1994  
ISSN: 0899-1847 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 1351 LINE COUNT: 00101  
... command to omit or erase the serial number once formatting is complete, but you can set the serial number to zero using DEBUG. This DEBUG script--executed at the hyphen prompt after you start-- changes the serial number on the disk in drive A: to zero:  
L 0 0 0...  
...0 0 0 1 to W 0 1 0 1. You don't have to set the serial number to zero--you can set it to any value you want. For example, changing the line  
E 27 0 0 0 0  
to read  
E 27 78 56 34...

**25/3,K/26 (Item 26 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
04476403 SUPPLIER NUMBER: 18205043 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**User-to-user. (increasing productivity by modifying serial numbers with batch files, and managing the Windows 95 menu) (PC Solutions) (Question and Answer) (Column)**  
Rubenking, Neil J.  
PC Magazine, v15, n8, p221(2)  
April 23, 1996  
DOCUMENT TYPE: Column ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 1215 LINE COUNT: 00112  
... BIOS Parameter Block. The next four bytes hold the serial number. If this marker is changed to 00, the serial number is no longer recognized. The batch file does not overwrite the serial number itself.

The **number DOS sets** is nearly random. If you'd like to have well-ordered serial numbers, NUSERIAL.BAT...

**25/3,K/28 (Item 28 from file: 608)**

DIALOG(R)File 608:KR/T Bus.News.

(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.

00349415 Story Number: 8510 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**TECHNOLOGY CAN CUT PRICE OF VIGILANCE AGAINST CHIP FRAUD**

Dean Takahashi

San Jose Mercury News

July 8, 1996 03:45 E.T.

DOCUMENT TYPE: Newspaper RECORD TYPE: Fulltext LANGUAGE: English

WORD COUNT: 588

...TEXT: it more difficult for counterfeiters to etch quality names on less-than-quality products.

Putting **serial numbers** on TV **sets** gave police a phenomenal tool for tracking stolen goods a couple of decades ago. Large...

...but chips had been considered too small and numerous to be individually tracked after they **change** hands more than twice. This left thieves free to remark chips, or etch false labels...

**25/3,K/33 (Item 33 from file: 608)**

DIALOG(R)File 608:KR/T Bus.News.

(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.

06569675 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**The Miami Herald CyberGuide Column**

Dan Keating

The Miami Herald

July 02, 1998

DOCUMENT TYPE: NEWSPAPER RECORD TYPE: FULLTEXT LANGUAGE: ENGLISH

WORD COUNT: 1131

...TEXT: the upside-down exclamation point with alt-173.

Some DOS and Windows programs use a **different numbering sequence**. If the **numbers** above don't work in a program you are using, try the **following**: alt-0241 for TILDE over lower-case n, alt-0233 for accent over lower case...

**25/3,K/36 (Item 36 from file: 608)**

DIALOG(R)File 608:KR/T Bus.News.

(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.

06634564 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Some High-Tech Advances Erode Right to Privacy**

Steven Oberbeck

Salt Lake Tribune

February 06, 1999

DOCUMENT TYPE: NEWSPAPER RECORD TYPE: FULLTEXT LANGUAGE: ENGLISH

WORD COUNT: 638

...TEXT: buying habits. It allows companies to engage in target marketing aimed at either reinforcing or **changing** buying decisions. And once the information is gathered, there is nothing to stop it from...

...Internet.

Threatened with a boycott, Intel backed off, saying the chips would be shipped with **serial - number** technology automatically **set** to the off position...

**25/3,K/37 (Item 37 from file: 608)**

DIALOG(R)File 608:KR/T Bus.News.  
(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.  
06643260 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Houston Chronicle Computing Column**  
Dwight Silverman  
Houston Chronicle  
March 05, 1999  
DOCUMENT TYPE: NEWSPAPER RECORD TYPE: FULLTEXT LANGUAGE: ENGLISH  
WORD COUNT: 838  
...TEXT: II chips had similar problems.  
Now we have the Pentium III, with its built-in **serial number** that  
privacy **groups** say amounts to "Big Brother Inside." And there's the fact  
that the Pentium III...  
...Pentium II, with 70 extra software commands to boost multimedia  
performance.  
After looking at the **following** two high-end Pentium III systems, I can  
say they're impressive -- as any system...  
...with the Pentium III serial number turned off. To turn it back on, you  
must **change** BIOS settings.  
Pavilion 8940 -- \$2,500, Hewlett-Packard. This consumer-oriented PC comes  
with plenty...

**25/3,K/38 (Item 38 from file: 47)**  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
05317639 SUPPLIER NUMBER: 53947448 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Chip IDs: Nothing Personal.(Intel's Pentium III microprocessor)(Product  
Information)(Column)**  
Machrone, Bill  
PC Magazine, 85(1)  
March 23, 1999  
DOCUMENT TYPE: Column ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 833 LINE COUNT: 00067  
ABSTRACT: Intel's Pentium III microprocessor has generated controversy  
because each chip incorporates a unique **serial number**. Civil-liberties  
**groups** and other privacy advocates reacted to news of this fact with  
alarm. People were anxious...  
...fact, PSN numbers, or something like them, could probably function as a  
basis for a **secure** transaction system.

File 34:SciSearch(R) Cited Ref Sci 1990-2004/Jan W4  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
File 169:Insurance Periodicals 1984-1999/Nov 15  
File 63:Transport Res(TRIS) 1970-2004/Dec  
File 8:Ei Compendex(R) 1970-2004/Jan W3  
File 94:JICST-EPlus 1985-2004/Jan W3  
File 6:NTIS 1964-2004/Jan W4  
File 139:EconLit 1969-2004/Jan  
Set Items Description  
S1 2560512 NUMBER??? OR NUMERAL? ? OR NUMERIC?  
S2 1639549 SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE-  
NT  
S3 4198226 DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?  
S4 2316941 ALTERNATE OR DIFFERENT  
S5 3855074 TWO  
S6 5769987 2  
S7 4510511 UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?-  
??  
S8 894224 SECUR??? OR SURETY OR SAFEGUARD??? OR PROTECT???

S9 11185 S1(2N)S2  
S10 33814 S1(2N)S3  
S11 30340 S1(2N)S4  
S12 24714 S1(2N)S5  
S13 28028 S1(2N)S6  
S14 420 S9(3N)S10:S13  
S15 90 S14 AND S7  
S16 7 S14 AND S8  
S17 4 S15 AND S16  
**S18 3 RD (unique items)**  
S19 89 S15:S16 NOT S17  
S20 86 RD (unique items)  
S21 13 S20/2001:2004  
S22 73 S20 NOT S21  
S23 77 S14(S)S7  
S24 5 S14(S)S8  
S25 59 S22 AND S23:S24  
**S26 59 Sort S25/ALL/PY,A**

**18/6/1 (Item 1 from file: 8)**  
03368472

Title: Effects of fatigue and heat stress on vigilance of workers in protective clothing.  
Conference Title: Proceedings of the Human Factors Society 35th Annual Meeting Part 1 (of 2)  
Publication Year: 1991

**18/6/2 (Item 1 from file: 6)**  
1691638 NTIS Accession Number: AD-A256 257/7  
**Annotated Bibliography on Relative Motion**  
(Final rept. 13 Mar 91-13 Mar 92)  
Aug 92

**18/6/3 (Item 1 from file: 139)**  
329807  
**TITLE: Why Did Economic Models Falsely Predict a Bush Landslide in 1992?**

PUBLICATION DATE: 1994

**26/6/1 (Item 1 from file: 6)**

0122928 NTIS Accession Number: AD-656 375/XAB  
**Rural Wire and Urban Wire for Telephone Distribution Systems**  
Dec 55

**26/6/2 (Item 2 from file: 6)**

0243496 NTIS Accession Number: AD-806 446/XAB  
**Synchronized Budding of Yeast Cells Following X-Irradiation**  
22 Oct 58

**26/6/3 (Item 3 from file: 63)**

00184801 DA  
**TITLE: INDEX TO MODEL AND EXPANDED RESISTANCE DATA SHEETS NO. 1-175**  
PUBLICATION DATE: 19660300  
DATA SOURCE: Society of Naval Architects and Marine Engineers

**26/6/4 (Item 4 from file: 63)**

00098774 DA  
**TITLE: TRACTION MOTOR RELIABILITY**  
PUBLICATION DATE: 19690000  
DATA SOURCE: American Railway Engineering Association

**26/6/5 (Item 5 from file: 6)**

0231679 NTIS Accession Number: PB-192 220/XAB  
**Guide to Research in Air Pollution: Projects Active in Calendar Year 1969**  
(7th ed)  
Apr 70

**26/6/8 (Item 8 from file: 63)**

00051880 DA  
**TITLE: SUGGESTED ARC-WELDING PROCEDURES FOR STEELS MEETING STANDARD**  
**SPECIFICATIONS**  
PUBLICATION DATE: 19740100  
DATA SOURCE: Welding Research Council

**26/6/13 (Item 13 from file: 8)**

00993462  
**Title: Asynchronous Pole-Changing Motors with Three Phase Switch-Over**  
**Winding.**  
Title: SILNIKI ZMIENNOBIEGUNOWE ASYNCHRONICZNE Z UZWOJENIAMI TROJFAZOWYMI  
PRZELACZALNYMI.  
Publication Year: 1980

**26/6/14 (Item 14 from file: 6)**

0986603 NTIS Accession Number: PB82-251224/XAB  
**Catalog of Government Patents. Volume 1: Chemical and Related Arts**  
**1966-74**  
c1981

**26/6/15 (Item 15 from file: 6)**

0986584 NTIS Accession Number: PB82-197070/XAB  
**Catalog of Government Patents. Volume 4: Abstracts 1975-80. Volume 5:**  
**Indexes 1975-80**  
c1982

26/6/16 (Item 16 from file: 8)  
01864949  
Title: IMPULSIVE NOISE SIMULATOR FOR THE LABORATORY TESTING OF RADIO COMMUNICATION SYSTEMS.  
Conference Title: 1984 IEEE National Symposium on Electromagnetic Compatibility.  
Publication Year: 1984

26/6/17 (Item 17 from file: 8)  
02269631  
Title: EXPERIMENTAL STUDY ON PRESSURE DROP AND HEAT TRANSFER IN A DUCT WITH A STAGGERED ARRAY OF CYLINDERS.  
Conference Title: Proceedings of the 1987 ASME-JSME Thermal Engineering Joint Conference.  
Publication Year: 1987

26/6/18 (Item 18 from file: 8)  
02622140  
Title: WATER INTERFERENCE OF PULSED FLUORESCENCE SO//2 MONITOR.  
Publication Year: 1988

26/6/19 (Item 19 from file: 94)  
00904578 JICST ACCESSION NUMBER: 89A0310495 FILE SEGMENT: JICST-E  
Initial phase of bronchial wall invasion of roentgenographically occult lung cancer., 1988

26/6/20 (Item 20 from file: 94)  
00748769 JICST ACCESSION NUMBER: 89A0477436 FILE SEGMENT: JICST-E  
Decomposition and reassembly of the age-time distribution., 1989

26/6/21 (Item 21 from file: 6)  
1550485 NTIS Accession Number: DE91001876  
Improvements for variance stabilizer on LANL FN tandem 1990

26/6/22 (Item 22 from file: 94)  
01459862 JICST ACCESSION NUMBER: 92A0131878 FILE SEGMENT: JICST-E  
Development of the "Title Change Map for Union Catalog of Serials": From the Map for Japanese serials to the Map for European language serials., 1991

26/6/23 (Item 23 from file: 94)  
01694491 JICST ACCESSION NUMBER: 92A0830792 FILE SEGMENT: JICST-E  
Disorders of Calculation using Figures in Brain-Damaged Patients., 1992

26/6/24 (Item 24 from file: 6)  
1658639 NTIS Accession Number: AD-A251 032/9  
Molecular Studies of Alphavirus Immunogenicity  
(Annual rept. 30 Mar 91-29 Mar 92)  
23 Apr 92

26/6/25 (Item 25 from file: 94)  
01658407 JICST ACCESSION NUMBER: 92A0723684 FILE SEGMENT: JICST-E  
Depressed cerebral function on caloric stimulation of the labyrinth., 1992

26/6/26 (Item 26 from file: 34)  
02225037 Genuine Article#: KL408 Number of References: 11  
Title: PRODUCING FROZEN-SECTIONS OF CALCIFIED BONE (Abstract Available)

26/6/27 (Item 27 from file: 94)  
01899731 JICST ACCESSION NUMBER: 93A0847148 FILE SEGMENT: JICST-E  
Numerical Simulation and Experiment of Excitation-Contraction Coupling of  
Skeletal Muscle., 1993

26/6/28 (Item 28 from file: 34)  
03891754 Genuine Article#: QN394 Number of References: 0  
Title: PHYLLOTACTIC PATTERNS IN CAPITULA OF CARLINA-ACAU LIS L (Abstract Available)

26/6/29 (Item 29 from file: 34)  
03024540 Genuine Article#: NA737 Number of References: 17  
Title: THE STABILITY OF IMPLDING DETONATIONS - RESULTS OF NUMERICAL  
SIMULATIONS (Abstract Available)

26/6/30 (Item 30 from file: 34)  
05035149 Genuine Article#: TK493 Number of References: 23  
Title: COMPARISON OF SIMULATED ANNEALING ALGORITHMS FOR CONFORMAL THERAPY  
TREATMENT PLANNING (Abstract Available)

26/6/32 (Item 32 from file: 34)  
04145130 Genuine Article#: RH808 Number of References: 21  
Title: GENE CONVERSION VS POINT MUTATION IN GENERATING VARIABILITY AT THE  
ANTIGEN RECOGNITION SITE OF MAJOR HISTOCOMPATIBILITY COMPLEX LOCI (

26/6/33 (Item 33 from file: 34)  
04139062 Genuine Article#: RG965 Number of References: 39  
Title: DO ADAPTATIONS IN SERIAL SARCOMERE NUMBER OCCUR WITH STRENGTH  
TRAINING (Abstract Available)

26/6/34 (Item 34 from file: 34)  
04059827 Genuine Article#: RB169 Number of References: 29  
Title: AT LEAST 4 MHC CLASS-I GENES ARE TRANSCRIBED IN THE HORSE -  
PHYLOGENETIC ANALYSIS SUGGESTS AN UNUSUAL EVOLUTIONARY HISTORY FOR THE  
MHC IN THIS SPECIES (Abstract Available)

26/6/35 (Item 35 from file: 94)  
02133124 JICST ACCESSION NUMBER: 95A0525461 FILE SEGMENT: PreJICST-E  
Relationship between genic sequences of tRNA genes from bacteria and their  
classification., 1995

26/6/36 (Item 36 from file: 34)  
05433109 Genuine Article#: VY011 Number of References: 24  
Title: EVOLUTION OF CARDIAC RHABDOMYOMA IN TUBEROUS SCLEROSIS COMPLEX (

26/6/37 (Item 37 from file: 34)  
05327372 Genuine Article#: VQ359 Number of References: 12  
Title: ON THE CHANGES OF RATE CONSTANTS AND ACTIVATION-ENERGIES DURING  
CATALYTIC REACTIONS - DECOMPOSITION OF NAOCL AND H2O2 (Abstract Available)

26/6/38 (Item 38 from file: 34)  
05154838 Genuine Article#: VD790 Number of References: 13  
Title: OLEIC-ACID AND LINOLEIC-ACID ARE THE MAJOR DETERMINANTS OF CHANGES

IN KERATINOCYTE PLASMA-MEMBRANE VISCOSITY (Abstract Available)

26/6/39 (Item 39 from file: 34)

06468340 Genuine Article#: YV371 Number of References: 27  
Title: Characterization of phage-displayed recombinant anti-idiotypic antibody fragments against coronavirus-neutralizing monoclonal antibodies (ABSTRACT AVAILABLE)

Publication date: 19970000

26/6/40 (Item 40 from file: 34)

05986003 Genuine Article#: XM039 Number of References: 25  
Title: Behavior of rats under fixed consecutive number schedules: Effects of drugs of abuse (ABSTRACT AVAILABLE)

Publication date: 19970700

26/6/41 (Item 41 from file: 34)

05985996 Genuine Article#: XM039 Number of References: 21  
Title: Increasing the variability of response sequences in pigeons by adjusting the frequency of switching between two keys (ABSTRACT)  
Publication date: 19970700

26/6/42 (Item 42 from file: 34)

05839027 Genuine Article#: XA983 Number of References: 15  
Title: Effect of topiramate on attention (ABSTRACT AVAILABLE)  
Publication date: 19970400

26/6/43 (Item 43 from file: 34)

05634352 Genuine Article#: WM188 Number of References: 43  
Title: Evolutionary distances between nucleotide sequences based on the distribution of substitution rates among sites as estimated by parsimony (ABSTRACT AVAILABLE)  
Publication date: 19970300

26/6/44 (Item 44 from file: 34)

05560784 Genuine Article#: WG766 Number of References: 25  
Title: Systematic identification of twins by computerised searches of NHS patient registers in the UK (ABSTRACT AVAILABLE)  
Publication date: 19970200

26/6/45 (Item 45 from file: 6)

2012228 NTIS Accession Number: PB97-179725  
United States Congressional Serial Set Catalog: Numerical Lists and Schedule of Volumes. 102nd Congress: 1991-1992 Entries and Indexes  
1997

26/6/46 (Item 46 from file: 34)

07363984 Genuine Article#: 156CJ Number of References: 34  
Title: Partial stress drop and frictional overshoot mechanism of seismic events induced by mining (ABSTRACT AVAILABLE)  
Publication date: 19981200

26/6/47 (Item 47 from file: 34)

07343345 Genuine Article#: 152ZM Number of References: 40  
Title: Direct investigations of reactions of 2-butoxy radicals using laser pulse initiated oxidation: Reaction with O<sub>2</sub> and unimolecular decomposition at 293 K and 50 mbar (ABSTRACT AVAILABLE)

Publication date: 19981200

26/6/49 (Item 49 from file: 34)  
07948526 Genuine Article#: 227NX Number of References: 31  
Title: Ontogenetic variation of phyllotaxis and apex geometry in vegetative  
shoots of *Sedum maximum* (L.) Hoffm. (ABSTRACT AVAILABLE)  
Publication date: 19990000

26/6/50 (Item 50 from file: 34)  
07887877 Genuine Article#: 219UE Number of References: 29  
Title: Ribosomal small subunit sequence variation within spores of an  
arbuscular mycorrhizal fungus, *Scutellospora* sp. (ABSTRACT AVAILABLE)  
Publication date: 19990600

26/6/51 (Item 51 from file: 34)  
07439642 Genuine Article#: 165ZM Number of References: 36  
Title: Percutaneous mechanical mitral commissurotomy with a newly designed  
metallic valvulotome - Immediate results of the initial experience in  
153 patients (ABSTRACT AVAILABLE)  
Publication date: 19990216

26/6/52 (Item 52 from file: 8)  
05759761  
Title: New generation of IR thermometers. Part 2: Trends and developments  
enhancing the power of IR thermometers  
Publication Year: 1999

26/6/54 (Item 54 from file: 34)  
09333726 Genuine Article#: 393WK Number of References: 16  
Title: A spherical rotation coordinate system for the description of  
three-dimensional joint rotations (ABSTRACT AVAILABLE)  
Publication date: 20001100

26/6/55 (Item 55 from file: 34)  
08935086 Genuine Article#: 346VF Number of References: 31  
Title: Transient spine density increases in the mid-molecular layer of  
hippocampal dentate gyrus accompany consolidation of a spatial learning  
task in the rodent (ABSTRACT AVAILABLE)  
Publication date: 20000000

26/6/56 (Item 56 from file: 34)  
08749100 Genuine Article#: 325EE Number of References: 55  
Title: Cerebral activation during multiplication: A functional MR imaging  
study of number processing (ABSTRACT AVAILABLE)  
Publication date: 20000600

26/6/59 (Item 59 from file: 139)  
040010  
TITLE: ESRC Data Archive catalogue: Study descriptions and Guide and  
indexes, 1986. 2 vols  
PUBLICATION DATE: 1986

26/7,K/6 (Item 6 from file: 6)  
DIALOG(R)File 6:NTIS  
(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.  
0356295 NTIS Accession Number: AD-751 937/XAB

**Techniques for Determining the Vehicle Attitude of Rocket AH7.886**

Sullivan, B. F. ; Stick, M. E. ; Marcou, R. J.

Boston Coll Chestnut Hill Mass Space Data Analysis Lab

Corp. Source Codes: 403460

Report No.: SCIENTIFIC-1; AFCRL-72-0575

30 Aug 72 41p

Journal Announcement: GRAI7302

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703) 605-6000 (other countries); fax at (703) 321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A03/MF A01

Contract No.: F19628-70-C-0017

Techniques for determining the attitude of the rocket axis for the vehicle AH7.886 are discussed. The attitude system consisted of a set of triaxial Schonstedt magnetometers, a Spectra-Physics sun sensor, **serial number** 2065-2, and an electronic multiplexer. Since no voltage greater than 3.24 volts was outputted by this multiplexer system, the sun angles could not be determined whenever the 3.24 volt saturation level was reached. To determine the attitude of the AH7.886 vehicle axis without available sun sensor data three different techniques were used, all yielding similar results. The first uses the rate of **change** of the magnetometers to solve for the attitude; the second simulates the attitude once an angle between the sun and rocket axis is known; and the third approach simulates the attitude after assuming sinusoidal motion for the elevation angle of the lateral magnetometer and full magnetic field readings by the lateral magnetometer for one-half a spin period. (Author)

**26/7,K/9 (Item 9 from file: 6)**

DIALOG(R)File 6:NTIS

(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

0517214 NTIS Accession Number: AD-A014 771/0/XAB

**Evaluation of Discrete Semiconductor Specifications. Volume 2. Diodes and Transistors Slash Sheets**

(Final rept. Mar-Nov 74)

Fanzoi, A. H. ; Brown, D. E.

Sperry Rand Corp Salt Lake City Utah UNIVAC Defense Systems Div

Corp. Source Codes: 390713

Sponsor: Rome Air Development Center, Griffiss AFB, N.Y.

Report No.: RADC-TR-75-154-VOL-2

Jun 75 475p

Journal Announcement: GRAI7523

See also Volume 1 dated Jun 75, AD-A014 770.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703) 605-6000 (other countries); fax at (703) 321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A20/MF A01

Contract No.: F30602-74-C-0149; AF-5519; 551904

The various device types recommended for Air Force equipments design are listed in tables preceding the specific recommendations for the slash sheets upgrading. These recommendations are in the form of proposed improved or new slash sheets for the selected devices. The sheets specify requirements, tests, characteristics, and include other recommendations for updating. The detail specification slash sheets are presented in groups following the applicable Report Table and are arranged within the group

in numerical sequence . The device type identification and general specification MIL-S-19500 slash sheet numbers are shown in the tables and as the reference identification in the heading of each sheet. This arrangement simplifies reference to the general characteristics of the devices in a manner that provides a common basis for recognition by technical personnel.

**26/7,K/10 (Item 10 from file: 8)**

DIALOG(R) File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.  
00476217 E.I. Monthly No: EI7508053356 E.I. Yearly No: EI75045139  
**Title: COMPUTER ANALYSIS OF MULTICIRCUIT SHELLS OF REVOLUTION BY THE FIELD METHOD.**

Author: Cohen, Gerald A.

Corporate Source: Struct Res Assoc, Laguna Beach, Calif

Source: NASA Contract Rep CR-2535 Jun 1975, 50 p

Publication Year: 1975

CODEN: NSCRAQ ISSN: 0565-7059

Language: ENGLISH

Journal Announcement: 7508

Abstract: The " field method " , presented previously for the solution of even-order linear boundary-value problems defined on one-dimensional open branch domains (i. e. , trees), is extended to boundary-value problems defined on one-dimensional domains containing circuits (i. e. , multicircuit graphs). This method converts the boundary-value problem into two successive numerically stable initial-value problems, which may be solved by standard forward integration techniques. In addition, a new method for the treatment of singular boundary conditions (i. e. , kinematic constraints) is presented. This method, which amounts to a (partial) interchange of the roles of " force " and " displacement " variables, is problem independent with respect to both accuracy and speed of execution. 7 refs.

**26/7,K/11 (Item 11 from file: 8)**

DIALOG(R) File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.  
00639332 E.I. Monthly No: EI7707047647 E.I. Yearly No: EI77022495  
**Title: ANALYSIS OF MULTICIRCUIT SHELLS OF REVOLUTION BY THE FIELD METHOD.**

Author: Cohen, Gerald A.

Corporate Source: Struct Res Assoc, Laguna Beach, Calif

Source: Computer Methods in Applied Mechanics and Engineering v 8 n 3 Jul-Aug 1976 p 301-318

Publication Year: 1976

CODEN: CMMECC ISSN: 0374-2830

Language: ENGLISH

Journal Announcement: 7707

Abstract: The field method, presented previously for the solution of linear boundary-value problems defined on one-dimensional open branch domains, is extended to one-dimensional domains which contain circuits. This method converts the boundary-value problem into two successive numerically stable initial-value problems, which may be solved by standard forward integration techniques. Also presented is a new treatment of singular boundary conditions (kinematic constraints). This is problem independent with respect to both accuracy and efficiency. The method has been implemented in a computer program which calculates the asymmetric response of ring-stiffened orthotropic multi-circuit shells of revolution.

Serial 09//693563

January 29, 2004

**26/7,K/31 (Item 31 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

04340113 Genuine Article#: RW712 Number of References: 17

**Title: ORTHOGONAL POLYNOMIALS AND COHERENT PAIRS - THE CLASSICAL CASE**

Author(s): MARCELLAN F; PETRONILHO J

Corporate Source: UNIV CARLOS III, ESCUELA POLITECN SUPER, DEPT INGN/E-28913

LEGANES//SPAIN//; UNIV COIMBRA, FCTUC, DEPT MATEMAT/P-3000

COIMBRA//PORTUGAL//

Journal: INDAGATIONES MATHEMATICAE-NEW SERIES, 1995, V6, N3 (SEP 25), P  
287-307

ISSN: 0019-3577

Language: ENGLISH Document Type: ARTICLE

Abstract: Let  $\{P_n(x)\}$  ( $n \geq 0$ ) and  $\{R_n(x)\}$  ( $n \geq 0$ ) be two sequences of simple monic polynomials such that

$$(*) P_n(x) = 1/n+1 R'(n+1)(x) - \sigma(n)R'(n)(x), n=0,1,2,\dots$$

where  $\{\sigma(n)\}$  ( $n \geq 0$ ) is a sequence of complex numbers. Consider the two following problems: (i) if  $\{R_n(x)\}$  ( $n \geq 0$ ) is a given system of orthogonal polynomials, to characterize all the sequences of orthogonal polynomials  $\{P_n(x)\}$  ( $n \geq 0$ ) and all the sequences of compatible parameters  $\{\sigma(n)\}$  ( $n \geq 0$ ) for which (\*) holds; (ii) the analogous problem, with the assumption that  $\{P_n(x)\}$  ( $n \geq 0$ ) is the given system of orthogonal polynomials. The first problem has been partially solved by Iserles et al. in [6], in the case in which  $\{R_n(x)\}$  ( $n \geq 0$ ) is a classical family. Here, we characterize the solution for both problems in the case in which the given system is some classical one.

**26/7,K/48 (Item 48 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

06543877 Genuine Article#: ZA268 Number of References: 11

**Title: Two ergodic sample-path properties of the Poisson process**

Author(s): Stadje W (REPRINT)

Corporate Source: UNIV OSNABRUCK, FB 6/D-49069 OSNABRUCK//GERMANY// (REPRINT)

Journal: JOURNAL OF THEORETICAL PROBABILITY, 1998, V11, N1 (JAN), P197-208

ISSN: 0894-9840 Publication date: 19980100

Publisher: PLenum PUBL CORP, 233 SPRING ST, NEW YORK, NY 10013

Language: English Document Type: ARTICLE

Abstract: For increasing sequences of real numbers we consider two types of asymptotic behavior that remind of the defining property of a (homogeneous) Poisson process according to which the numbers of points in disjoint intervals are independent and follow Poisson distributions with specified parameters. We prove that almost all paths of a Poisson process show this asymptotic behavior, and characterize the Poisson process by these properties. Further we discuss the connection to equidistribution notions.

**26/7,K/53 (Item 53 from file: 94)**

DIALOG(R)File 94:JICST-EPlus

(c) 2004 Japan Science and Tech Corp(JST). All rts. reserv.

04377526 JICST ACCESSION NUMBER: 99A0732441 FILE SEGMENT: JICST-E

Incremental Construction of Ad-Hoc Network.

TOSAKI TAKASHI (1); KAWAGUCHI NOBUO (1); TOYAMA KATSUHIKO (1); INAGAKI YASUYOSHI (1)  
(1) Nagoya Univ., Grad. Sch.  
Joho Shori Gakkai Shinpojiumu Ronbunshu, 1999, VOL.99,NO.7, PAGE.261-266,  
FIG.3, TBL.4, REF.10  
JOURNAL NUMBER: Y0978BAT ISSN NO: 1344-0640  
UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654 621.396.73  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Conference Proceeding  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication  
ABSTRACT: In this paper, we propose an incremental construction method for ad-hoc networks based on infrared communication. Each mobile host periodically probes other hosts while exchanging messages between known hosts. When a host discovers new neighbor hosts, it exchanges the **updated** node information with all neighbor hosts. Node information contains **two sequential numbers** which avoid the looping and the **updating** problems, and it is piggybacked onto messages to decrease the time costs required for each infrared connection. (author abst.)

**26/7,K/58 (Item 58 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2004 Inst for Sci Info. All rts. reserv.

08654014 Genuine Article#: 312FB Number of References: 18

**Title: Event-related brain potentials elicited by a number discrimination task**

Author(s): Kong JA (REPRINT) ; Wang YP; Zhang WT; Wang HJ; Wei HF; Shang HY ; Yang XZ; Zhuang D

Corporate Source: CHINA ACAD TRADIT CHINESE MED,INST ACUPUNCTURE & MOXIBUST/BEIJING 100700//PEOPLES R CHINA/ (REPRINT); CAPITAL UNIV MED SCI,XUANWU HOSP, DEPT NEUROL/BEIJING 100053//PEOPLES R CHINA/; CHINESE ACAD SCI,INST PSYCHOL/BEIJING 100012//PEOPLES R CHINA/

Journal: NEUROREPORT, 2000, V11, N6 (APR 27), P1195-1197

ISSN: 0959-4965 Publication date: 20000427

Publisher: LIPPINCOTT WILLIAMS & WILKINS, 530 WALNUT ST, PHILADELPHIA, PA 19106-3621

Language: English Document Type: ARTICLE

Abstract: To study the number cognition process, we recorded event-related potentials (ERPs) in 14 subjects when they were indicating whether a number pair was the same or not. The **two numbers** given in **sequence** were either the same (condition 1) or different (condition 2). After 270 ms **following** the onset of the second stimulus in condition 2, a negative component N270 was recorded on the scalp with the most negative amplitude at the central and occipital areas. Hemispheric asymmetry was not observed in the potential. This negative component is considered to reflect the mismatching process for numbers in the brain. NeuroReport 11:1195-1197 (C) 2000 Lippincott Williams & Wilkins.

Serial 09//693563

January 29, 2004

File 35:Dissertation Abs Online 1861-2004/Dec  
 File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
 File 65:Inside Conferences 1993-2004/Jan W4  
 File 2:INSPEC 1969-2004/Jan W3  
 File 233:Internet & Personal Comp. Abs. 1981-2003/Sep  
 File 474:New York Times Abs 1969-2004/Jan 26  
 File 475:Wall Street Journal Abs 1973-2004/Jan 26  
 File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Dec  
 File 256:SoftBase:Reviews,Companies&Prods. 82-2004/Dec

Set	Items	Description
S1	42	CASH()CONTROL????
S2	51764	SAFE OR SAFES OR CASHBOX OR CASHBOXES OR CASH()REGISTER? ?
S3	878606	<b>SEQUEN?</b> OR CONSECUTIV? OR <b>SUCCESSIV?</b> OR <b>SUCCESSION?</b> OR SUCCEEDING OR NEXT OR <b>SUBSEQUENT?</b>
S4	906286	FOLLOW???
S5	1677356	<b>NUMBER???</b> OR <b>NUMERICR?</b>
S6	2	S1 AND S2
S7	1	<b>RD (unique items)</b>
S8	1299	S3()S5 OR S4(N)S5
S9	8	S2 AND S8
S10	8	S9 NOT S6
S11	7	RD (unique items)
S12	1	S11/2001:2004
S13	6	S11 NOT S12
S14	6	<b>Sort S13/ALL/PY,A</b>
S15	0	S8 AND S1
S16	644	CASH(5N)CONTROL????
S17	0	S8 AND S16
S18	30	S2 AND S16
S19	4	S3:S4 AND S18
S20	4	<b>RD (unique items)</b>

7/7/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

01017850 INSPEC Abstract Number: C77007070

Title: Cash control system for commerce

Journal: Buerotechnik vol.24, no.11 p.68

Publication Date: Nov. 1976 Country of Publication: West Germany

CODEN: BUERDN

Language: German Document Type: Journal Paper (JP)

Treatment: Applications (A); Economic aspects (E); Practical (P)

Abstract: The article describes the Nixdorf 8862 EDP system especially designed for controlling cash receipts or similar transactions from several points. The three main components are an 'intelligent' cash register type 8812, an 'intelligent' visual display unit at the cash point and the central unit associated with a 'manager' terminal. The latter is used to regulate general features such as start/stop operations, date and time, currency conversion, etc. Individual terminals deal with transactions for goods and service sales, cash flow, etc. and include an alphanumeric keyboard. (0 Refs)

Subfile: C

14/6/1 (Item 1 from file: 2)

01749982 INSPEC Abstract Number: B81047271

Title: Design choices for selective-repeat retransmission protocols

Publication Date: July 1981

**14/6/2 (Item 2 from file: 2)**

03617728 INSPEC Abstract Number: B90030976, C90034561  
**Title: Verified data transfer protocols with variable flow control**  
Publication Date: Aug. 1989

**20/7,K/1 (Item 1 from file: 583)**

DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.  
06133173  
LE BON MARCHE OPTIMISE SON ENCAISSEMENT  
FRANCE: BON MARCHE'S NEW **CASH REGISTER SYSTEM**  
01 Informatique (ZH) 24 Feb 1995 p.25  
Language: FRENCH

In France, the Bon Marche department stores has invested FF 15mn in a new **cash register** system, with 200 IBM **cash registers**. It will make it possible to carry out a detailed **follow up** of operations throughout the day, such as the impact of a promotion, or the turnover of a product or a department. The **cash registers** are connected to seven PS/2 personal computers. Each manages a group of **cash registers**, **controls** the till collection, and manages customer files. The entire system is connected to an AS/400 where base information is stored. This new system can handle a total of 350 **cash registers**.

**20/7,K/2 (Item 2 from file: 583)**

DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.  
04568125

La Sweda si riorganizza e archivia il primo semestre '91 in/  
ITALY - SWEDA SEES CONTINUED GROWTH  
Sole 24 Ore (ISO) 8 October 1991 p27

Language: Italian  
Sweda (Italy), **cash register** and industrials company **controlled** by the Cameli-Gerolimich group, reports first-half 1991 turnover of L20 bil from **cash register** activities with exports to Greece and Hungary up **following** the recent introduction of obligatory till receipts in retail outlets. Sweda expects to post a 1991 turnover of L40 bil for **cash register** activities, assisted by the 20-25% upturn in the domestic **cash register** market due to replacement of the tills acquired in 1982-82 when till receipts were made compulsory. Sweda is to invest some L11 bil in 1991.\*\*

**20/7,K/3 (Item 3 from file: 583)**

DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.  
04274776

NEC LAUNCHES REGIPORT ECR  
JAPAN - NEC LAUNCHES REGIPORT ECR  
Office Equipment & Products (OEP) 0 May 1991 p29  
ISSN: 0387-5245

NEC has launched the Regiport PC-RG120, intelligent electronic **cash register**, targetted at **controlling** operations in small-scale stores. The register includes a 3.5 inch floppy disk drive, and versions are available with communication functions and bar code scanner, which can be connected to a PC-9800 for sales data control. NEC forecasts 20k unit sales over the **next** two years.

File 15:ABI/Inform(R) 1971-2004/Jan 27  
File 9:Business & Industry(R) Jul/1994-2004/Jan 26  
File 610:Business Wire 1999-2004/Jan 27  
File 810:Business Wire 1986-1999/Feb 28  
File 613:PR Newswire 1999-2004/Jan 27  
File 813:PR Newswire 1987-1999/Apr 30  
File 476:Financial Times Fulltext 1982-2004/Jan 27  
File 624:McGraw-Hill Publications 1985-2004/Jan 26  
File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 26  
File 634:San Jose Mercury Jun 1985-2004/Jan 26  
File 20:Dialog Global Reporter 1997-2004/Jan 27  
Set Items Description  
S1 1114 CASH() CONTROL????  
S2 1216043 SAFE OR SAFES OR CASHBOX OR CASHBOXES OR CASH() REGISTER? ?  
S3 7984290 SEQUEN? OR CONSECUTIV? OR SUCCESSIV? OR SUCCESSION? OR SUC-  
CEEDING OR NEXT OR SUBSEQUENT?  
S4 6921023 FOLLOW???  
S5 7070653 NUMBER?? OR NUMERICR?  
S6 . 47 S1(S)S2  
S7 16382 S3()S5 OR S4(N)S5  
S8 0 S6(S)S7  
S9 63 S2(S)S7  
S10 0 S1(S)S7  
S11 15890 CASH(5N) CONTROL????  
S12 1 S9(S)S11 [too recent]  
S13 4 S7(S)S11  
S14 3 S13 NOT S12  
S15 3 RD (unique items)  
S16 62 S9 NOT S12:S13  
S17 57 RD (unique items)  
S18 45 S17/2001:2004  
S19 12 S17 NOT S18  
S20 12 Sort S19/ALL/PD,A  
S21 48635 S2/DE  
S22 1 S9 AND S21  
S23 0 S22 NOT S16  
S24 1 S2/TI AND S9  
S25 0 S24 NOT S16  
S26 1 S11/TI, DE AND S7  
S27 1 S26 NOT (S12 OR S13 OR S16)  
S28 655357 DEPOSIT? ?  
S29 62 S7(S)S28  
S30 59 S29 NOT (S12 OR S13 OR S16 OR S26)  
S31 53 RD (unique items)  
S32 32 S31/2001:2004  
S33 21 S31 NOT S32  
S34 21 Sort S33/ALL/PD,A  
S35 2764675 CASH  
S36 23 S7(5N)S35  
S37 21 S36 NOT (S12 OR S13 OR S16 OR S26 OR S29)  
S38 21 RD (unique items)  
S39 7 S38/2001:2004  
S40 14 S38 NOT S39  
S41 14 Sort S40/ALL/PD,A

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00524070 90-49827  
**Make Room for Your CU's Growth**  
Lanphear, Sue  
Credit Union Magazine v56n11 PP: 62-65 Nov 1990 ISSN: 0011-1066  
JRNL CODE: CUG  
**ABSTRACT:** Construction and automation can help credit unions service their members more efficiently. For example, Fitzsimons Federal Credit Union (Aurora, Colorado) built a service center away from its main branch to make it easier for members to make transactions. At IBM Hudson Valley Employees Credit Union (Poughkeepsie, New York), the first off-site branch was opened for the same reason. Today, the IBM credit union serves 90,000 members from 6 main branches and 7 satellite branches on sponsors' premises. Both Fitzsimons and IBM Hudson store all records at their main branch, with the outlying centers connected by terminals to a main computer. While building service centers is desirable, it may not always be the best answer for growth; instead, it may be better to rearrange the current office or automation. For a teller workstation, automation includes the ability to **control cash**, print receipts, audit trails, and **sequence numbers**. Free-standing automated terminals - or automated teller machines - offer an option for expanding without having to build.

**20/8/8 (Item 8 from file: 610)**

DIALOG(R)File 610:(c) 2004 Business Wire. All rts. reserv.  
00241957 20000327087B1307 (USE FORMAT 7 FOR FULLTEXT)  
**(GBLX) Global Crossing Teams Up With I-Link; Agreement Allows I-Link to Become First Company Ever to Offer One-Touch Internet Calling from Home Phones Not PCs**  
Monday, March 27, 2000 09:03 EDT  
WORD COUNT: 1,068  
COMPANY NAMES: i-link, inc.; global crossing ltd.; I LINK INC; MEDCROSS INC; LANS; FITZGERALD COMMUNICATIONS INC  
GEOGRAPHIC NAMES: NEW YORK; USA; AMERICAS; NORTH AMERICA  
INDUSTRY NAMES: COMMUNICATIONS SOFTWARE; CORPORATE NETWORKS; ELECTRONIC MAIL; INTERNET; NETWORKS; TELECOMMUNICATIONS; TELEPHONES; COMMUNICATIONS TECHNOLOGIES; COMPUTER SOFTWARE; COMPUTERS; CORPORATE; DATA COMMUNICATIONS

**20/8/9 (Item 9 from file: 610)**

DIALOG(R)File 610:(c) 2004 Business Wire. All rts. reserv.  
00260573 20000419110B0692 (USE FORMAT 7 FOR FULLTEXT)  
**I-Link's V-Link 3.0 Named Product of the Year; Enhanced Service Platform Receives Network Magazine Award to be Presented At NetWorld + Interop**  
Wednesday, April 19, 2000 12:21 EDT  
WORD COUNT: 785  
COMPANY NAMES: i-link, inc.; I LINK INC; MEDCROSS INC; FITZGERALD COMMUNICATIONS INC; INTERNET TODAY  
INDUSTRY NAMES: COMMUNICATIONS SOFTWARE; COMPUTER SOFTWARE; CORPORATE NETWORKS; ELECTRONIC MAIL; INTERNET; NETWORKS; TELECOMMUNICATIONS; TELEPHONES; COMMUNICATIONS TECHNOLOGIES; COMPUTERS; CORPORATE; DATA COMMUNICATIONS  
EVENT NAMES: SERVICES

**20/8/12 (Item 12 from file: 15)**

DIALOG(R)File 15:(c) 2004 ProQuest Info&Learning. All rts. reserv.

00094854 79-09865

**In Praise of Bulk Filing of Checks**

DESCRIPTORS: Bank management; Bulk; Filing systems; Files management ; Checks

CLASSIFICATION CODES: 8100 (CN=Financial services industry); 5200 (CN=Communications & information management)

**20/3,AB,K/1 (Item 1 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

00366590 87-25424

**Confessions of a Bank Con Man**

Blank, Dennis

Bankers Monthly v104n6 PP: 32-36 Jun 1987 ISSN: 0005-5476 JRNL CODE: BKM

ABSTRACT: Frank W. Abagnale has successfully posed as an airline pilot, a doctor, a bank guard, and a lawyer. During a 5-year period, he cashed over \$2.5 million worth of bad checks in all 50 states and 26 foreign countries. Today, Abagnale is a leading authority on credit card fraud, bad checks, money-changing scams, and phony IDs. His multimillion-dollar-a-year business provides fail-safe security systems for major stores and banks. According to Abagnale, check deposit slips are of great value to con artists. Deposit slips enable the con artists to make a deposit using a phony check. Part of the check is deposited, part is returned as cash. Many check forgers never run into trouble because the tellers fail to check the signature. Tellers should examine checks to make sure that at least one side is perforated. They should also learn to read the routing code in the 9 consecutive numbers inside 2 brackets at the bottom left-hand corner of the check.

**20/3,AB,K/3 (Item 3 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

00604803 92-19906

**Cashing In on CCTV Technology**

Norton, Kelly

Security Management Supplement PP: 26A-29A Mar 1992 ISSN: 0145-9406

JRNL CODE: SEM

WORD COUNT: 1964

ABSTRACT: Closed circuit television (CCTV) is being used as an integral part of convenience store security programs. Many c-stores have installed CCTV systems with interactive video and audio (IAVA) to deter robbery and increase employee safety. Using IAVA, the retailer has the capability to communicate, monitor, and record audio and video activity in the store selectively from a remote central alarm monitoring location. The IAVA communications can be initiated either by an employee activating an alarm or by the central station dialing the store. While IAVA is an effective monitoring tool to deter robbery and supervise store operations, the 50% loss in picture quality that occurs during IAVA transmissions and its inability to process color makes it less effective in documenting evidence to control shrink. Color recording is beneficial because it provides more information on a subject's appearance. In addition to color recording, retailers are relying more on CCTV electronic cash register interfacing to combat internal shrink.

...TEXT: each shift.

The number assigned to a particular event is a combination of event type,

cash register number, and sequential number of the event. Exhibit 3 is an example of an event number assignment. (Exhibit 3...)

**20/3,AB,K/4 (Item 4 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
01195622 98-45017

**Totem: A fault-tolerant multicast group communication system**

Moser, L E; Agarwal, D A; Melliar-Smith P M; Budhia, R K;  
Lingley-Papadopoulos, C A  
Communications of the ACM v39n4 PP: 54-63 Apr 1996 ISSN: 0001-0782  
JRNL CODE: ACM  
WORD COUNT: 5827

**ABSTRACT:** The Totem system, developed at the University of California, Santa Barbara, provides reliable, totally ordered multicasting of messages over local area networks and exploits the hardware broadcasts of such networks to achieve high performance. Total ordering of messages simplifies the programming of fault-tolerant distributed applications. If distributed operations are derived from the same messages in the same total order, consistency of replicated information is easier to maintain. Simplified programming results in fewer programming errors and increased reliability for the application. Totem is intended for complex applications in which both fault tolerance and real-time performance are critical. Such complex applications are typically built as asynchronous event-driven distributed systems. The types of applications that can benefit from Totem include: 1. air traffic control, 2. industrial automation, 3. transaction processing and 4. banking.

...TEXT: aru, of the token enables a processor to determine, after a full token rotation, a sequence number so that all processors on the ring have received all messages with lower sequence numbers. A processor can deliver a message as a safe message if the sequence number of the message is less than or equal to this sequence number. When a processor delivers a message as safe, it can reclaim the buffer space used by the message because it will never need...

**27/3,AB,K/1 (Item 1 from file: 810)**

DIALOG(R)File 810:Business Wire  
(c) 1999 Business Wire . All rts. reserv.

0362811 BW653

**COMPUTER ASSOCS:** CA ships updated module for ACCPAC Plus Accounting; job costing module provides more timely information, better cash flow control  
October 19, 1993

Byline: Business Editors & Computer Industry Writers  
...corrected and posted, print and clear the posting journals selectively based on system-assigned posting sequence numbers, and limit transactions posted by entering a posting cut-off date...

**34/8/4 (Item 4 from file: 636)**

DIALOG(R)File 636:(c) 2004 The Gale Group. All rts. reserv.  
01542222 Supplier Number: 42241156 (USE FORMAT 7 FOR FULLTEXT)

**WEST PLAINS BANK PREPARES FOR '90s WITH SWITCH TO OPTICAL STORAGE**

July 25, 1991

Word Count: 1289

PUBLISHER NAME: Phillips Business Information, Inc.

INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation)

**34/8/11 (Item 11 from file: 636)**  
DIALOG(R)File 636:(c) 2004 The Gale Group. All rts. reserv.  
02310729 Supplier Number: 44487551 (USE FORMAT 7 FOR FULLTEXT)  
**SAME-DAY SETTLEMENT PUSHING BANKS TO ECP**  
March 3, 1994  
Word Count: 1641  
PUBLISHER NAME: Phillips Business Information, Inc.  
INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation)

**34/8/12 (Item 12 from file: 636)**  
DIALOG(R)File 636:(c) 2004 The Gale Group. All rts. reserv.  
02322441 Supplier Number: 44523926 (USE FORMAT 7 FOR FULLTEXT)  
**SAME-DAY SETTLEMENT IMPACT: WILL THE NOVOCAINE WEAR OFF?**  
March 18, 1994  
Word Count: 590  
PUBLISHER NAME: Phillips Business Information, Inc.  
INDUSTRY NAMES: BANK (Banking, Finance and Accounting); BUSN (Any type of business)

**34/8/13 (Item 13 from file: 15)**  
DIALOG(R)File 15:(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00979154 96-28547 \*\*USE FORMAT 9 FOR FULL TEXT\*\*  
**A shopper's guide to accounting software WORD COUNT: 8725 LENGTH: 18**  
Pages  
Feb 1995  
GEOGRAPHIC NAMES: US  
DESCRIPTORS: Software reviews; Software packages; Automated accounting systems; CPAs; Purchasing; Manyproducts; Functions  
CLASSIFICATION CODES: 9190 (CN=United States); 9120 (CN=Product specific); 5240 (CN=Software & systems); 4110 (CN=Accountants); 5120 (CN=Purchasing)

**34/8/18 (Item 18 from file: 20)**  
DIALOG(R)File 20:(c) 2004 The Dialog Corp. All rts. reserv.  
01533500  
**Khan panel report on harmonisation of banks**  
SECTION TITLE: ECONOMY  
April 25, 1998  
WORD COUNT: 3793  
COMPANY NAMES: Small Industries Development Bank of India (SIDBI)  
DESCRIPTORS: Financial Sector Regulation; Derivatives  
COUNTRY NAMES/CODES: India (IN)  
REGIONS: South Asia; Asia  
SIC CODES/DESCRIPTIONS: 9311 (Finance Taxation & Monetary Policy)

**34/3,AB,K/3 (Item 3 from file: 636)**  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.  
01374781 Supplier Number: 41713203  
**VONS UTILIZING ACH DEBIT CHECK CARD WITH PLANS TO ADD AUTOMATED CHECKOUT**  
Card News, v5, n23, p5  
Dec 3, 1990  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade

Word Count: 594

... Most customers have opted to use the Vons card, which contains only a **sequential number** and not their name. They submit a **deposit** slip to Vons with their bank account information, which then is processed in a host...

**34/3,AB,K/5 (Item 5 from file: 15)**

DIALOG(R) File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00605934 92-21037

**Electronic Cash Concentration and Deposit Verification**

Sultanik, H. Michael

Journal of Cash Management v12n2 PP: 54-59 Mar/Apr 1992 ISSN: 0731-1281

JRNL CODE: JCG

WORD COUNT: 2609

**ABSTRACT:** National Convenience Stores Inc.'s (NCS) use of automation to reduce costs and streamline its cash concentration and deposit verification processes is examined. NCS was suffering from a decentralized cash concentration. In order to expedite the process of updating the general ledger at NCS and centralize the cash concentration process, a programmed Norand, hand-held, data entry device was installed in each store in 1988. The manager of treasury operations designed software specifications and a local programming company was hired to developed a PC-based package which would allow the treasury department to handle the entire cash concentration process using a PC. Another problem NCS suffered from was manual deposit verification. Under electronic deposit verification, banks electronically capture the amount of every deposit by store. This type of automation can provide operations management with only exceptions, thereby streamlining the process of addressing potential deposit losses.

...TEXT:

...Some banks can use the Magnetic Ink Character Recognition (MICR) line on the **deposit** slip to identify and capture store **numbers** when numerous stores **deposit** funds into one account. Some banks can also capture **sequence numbers** in the MICR line which can be used to match **deposit** adjustments to specific **deposits** ...

**34/3,AB,K/7 (Item 7 from file: 636)**

DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

01852000 Supplier Number: 43170036

**THE NUTS AND BOLTS OF GETTING ECP OFF THE GROUND**

Item Processing Report, v3, n14, pN/A

July 23, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 1085

... when the paper and electronic checks are reconciled.

The original bank of deposit (sending bank) **sequence number** is kept on file by the receiving bank in case the paper never arrives. Should such a circumstance occur, the receiving bank can call the sending bank with the missing **sequence numbers**, and the sending bank can then examine their microfilm and retrieval/archival systems.

Software To...

...a look at how software on the market is handling this issue.

One example of **sequence number** assignment is J.D. Carreker's (JDCA) CheckLink, which will automatically assign a **sequence number** to each ECP check received. Using this **number** CheckLink automatically tracks

each electronic check as it is sent to the bank's electronic demand **deposit** accounting (DDA) system. Also included is a module to allow immediate cross-referencing between all...

**34/3,AB,K/8 (Item 8 from file: 15)**  
DIALOG(R) File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00654629 93-03850  
**Implementing Bank Consolidation and Automated Cash Mobilization**  
Sweeney, Dennis; Patterson, William S.  
Journal of Cash Management v12n6 PP: 58-64 Nov/Dec 1992 ISSN: 0731-1281  
JRNL CODE: JCG  
WORD COUNT: 1828

**ABSTRACT:** In the typical scenario, a retailer maintains separate bank accounts for each store location and uses point-of-sale polling to provide the corporate cash manager with information relevant to cash concentration. There are several things wrong with this. For example, these store accounts must be manually reconciled each month, and deposits to these accounts must be manually verified. Accomplished manually, these processes are labor intensive, untimely, and fraught with problems. To attack the problem, PepsiCo Inc. recently organized a task force, which included members from corporate treasury and representatives from each of the company's 3 restaurant divisions: Pizza Hut, Taco Bell, and KFC. The existing system needed improvement, but each representative had different objectives. Together, the task force developed a plan for automating the deposit verification and bank-reconciliation functions that would support bank consolidation and provide timely information to minimize balances, improve mobilization, and reduce bank fees.

...TEXT: profit and loss without trying to specifically identify each charge.

\* Endorse checks with store and **sequence numbers** so that NSF checks can be charged back to a specific store and/or **deposit** ticket.

\* Try to balance the **number** of deposits per day based on the risk of...

**34/3,AB,K/10 (Item 10 from file: 636)**  
DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.  
02185069 Supplier Number: 44122435

**Banks Take A Knife To Their ATM Costs**

Bank Network News, pN/A  
Sept 27, 1993  
Language: English Record Type: . Fulltext  
Document Type: Newsletter; Trade  
Word Count: 1145

... that task and have more experience in catching errors.

Norwest has also targeted its ATM **deposit** -processing operations for changes, but has taken a different approach than NBD. Norwest is now printing a greater amount of information on their **deposit** envelopes from the ATM. Previously, only a transaction **sequence number** was printed on an ATM **deposit** envelope. A bank employee had to match this **number** against an audit tape to verify...

**34/3,AB,K/14 (Item 14 from file: 15)**  
DIALOG(R) File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.  
00974561 96-23954

**The best ways to concentrate cash**

Tollman, Stanley L

Corporate Cashflow v16n2 PP: 40-41 Feb 1995 ISSN: 1040-0311

JRNL CODE: CFL

WORD COUNT: 1644

ABSTRACT: As a follow-up to last month's discussion of cash concentration, 8 ways to move funds to a concentration account are discussed. These are: 1. wire transfers, which are the most expensive per transaction, 2. depository transfer checks, or paper instruments used to transfer funds between 2 bank accounts with common ownership, 3. automated clearing house (ACH) debits, a low-cost, electronic way to move funds, 4. anticipatory concentration, which may work well for companies whose deposits are largely cash and generally quite predictable, 5. zero-balanced accounts, which are supported by accounting systems that link different accounts within the same bank, 6. branch concentration accounts, which also rely on the concentration bank's demand deposit accounting system, 7. stock brokerage accounts, a low-cost alternative for a company with a money-market mutual fund account at a non-bank investment company, and 8. mail concentration, which is rarely used today except by companies with very low daily sales per location.

...TEXT: bank's DDA system. In the ZBA structure, multiple accounts are used to identify the **deposit** source (store number). In a branch concentration system, a store number and **sequence number**, preprinted on each **deposit** slip, identify the source of every **deposit**.

Dozens of retail locations can then use the same account, accomplishing the concentration and preserving...

**34/3,AB,K/15 (Item 15 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

01038563 96-87956

**Cash management for small businesses: The new profile**

Connors, Leigh S

TMA Journal v15n3 PP: 42-46 May/Jun 1995 ISSN: 1080-1162 JRNL CODE:  
JCG

WORD COUNT: 1968

ABSTRACT: The days of the "mom and pop" operation are all but over. These small companies are being replaced by more sophisticated, more competitive and more automated organizations. To compete today, a small business must become as professional, competent and disciplined as a Fortune 500 company. The new small business has to take advantage of all available tools, including cash management services. The **number** of small businesses has increased by 50% over the last 5 years, making this market the growth sector of the 1990s. Several small companies which are effectively using cash management services are profiled.

...TEXT: significantly reducing the cost of funds transfers.

To assist Tiptop with the individual property reconciliations, **deposit** reconciliation was implemented; however, not in the traditional sense. In Tiptop's case, **deposit** tickets were encoded with **consecutive numbers** to be used for individual closings.

The benefits to Tiptop have been considerable. Tiptop can...

**34/3,AB,K/16 (Item 16 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

02314728 6648859

**The Paper Dragon**

Anonymous

Banking Management v71n3 PP: 66 May/Jun 1995 ISSN: 1049-1775

JRNL CODE: BAD

**ABSTRACT:** Current counterfeit control measures include: 1. deposit agreements requiring the use of the bank's vendor when ordering checks, 2. software products which flag suspicious checks based on deviations from established ranges of **sequence numbers**, dollar amounts, and volume, and 3. reviewing MICR rejects before repairing them. The prevention of new-account fraud requires comprehensive account-opening procedure focused on knowing the customer. Banks should analyze previous losses in developing in-house early warning systems. Chemical Bank has put several such systems in place, including the Fraud Prevention System, a database of names and addresses of individuals and businesses previously identified as undesirable. A list of vendors that provide negative databases or other check fraud prevention tools is included.

**34/3,AB,K/21 (Item 21 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

02062775 59718773

**Beyond account consolidation: Advanced account management choices for retailers**

Dubyak, Beth A

Afp Exchange v20n3 PP: 62-66 Summer 2000 ISSN: 0731-1281 JRNL CODE:  
JCG

WORD COUNT: 2926

**ABSTRACT:** Today's retailers have many choices beyond account consolidation. Many are turning to **serialized** deposit tickets, return check presentment and outsourcing to effectively manage their treasury operations. By consolidating accounts and selecting either a single account or shadow account structure, retail financial professionals can significantly enhance their deposit process.

...TEXT: use of fixed-length fields.

This is how it works. The store uses its own **deposit** tickets for its individual location. Each **deposit** ticket is **sequentially numbered** and encoded in the auxiliary onus field of the **deposit** ticket. For shadow accounts, the entire field is available. For single accounts...

**41/3,AB,K/2 (Item 2 from file: 15)**

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

02556276 254348901

**Fraud auditing**

Vanasco, Rocco R

Managerial Auditing Journal v13n1 PP: 4-71 1998 ISSN: 0268-6902

JRNL CODE: MAJ

WORD COUNT: 49489

**ABSTRACT:** This paper examines the role of professional associations, governmental agencies, and international accounting and auditing bodies in promulgating standards to deter and detect fraud, domestically and abroad. Specifically, it focuses on the role played by the US Securities and Exchange Commission (SEC), the American Institute of Certified Public Accountants (AICPA), the Institute of Internal Auditors (IIA), the Institute of Management Accountants (IMA), the Association of Certified Fraud Examiners (ACFE), the US Government Accounting Office (GAO), and

other national and foreign professional associations, in promulgating auditing standards and procedures to prevent fraud in financial statements and other white-collar crimes. It also examines several fraud cases and the impact of management and employee fraud on the various business sectors such as insurance, banking, health care, and manufacturing, as well as the role of management, the boards of directors, the audit committees, auditors, and fraud examiners and their liability in the fraud prevention and investigation.

Serial 09//693563

January 29, 2004

File 275:Gale Group Computer DB(TM) 1983-2004/Jan 26

File 621:Gale Group New Prod.Annou.(R) 1985-2004/Jan 26

File 16:Gale Group PROMT(R) 1990-2004/Jan 26

File 160:Gale Group PROMT(R) 1972-1989

File 148:Gale Group Trade &amp; Industry DB 1976-2004/Jan 26

Set Items Description

S1 935 CASH()CONTROL????

S2 866372 SAFE OR SAFES OR CASHBOX OR CASHBOXES OR CASH()REGISTER? ?

S3 4009508 SEQUEN? OR CONSECUTIV? OR SUCCESSIV? OR SUCCESSION? OR SUCCEEDING OR NEXT OR SUBSEQUENT?

S4 3305772 FOLLOW???

S5 4230636 NUMBER?? OR NUMERICR?

S6 8816 (ARMOURED OR ARMORED) () (CAR OR CARS OR TRUCK? ?)

S7 10321 S3()S5 OR S4(N)S5

S8 47 S1(S)S2

S9 0 S7(S)S8

S10 47 S1(S)S8

S11 0 S1(S)S7

S12 12 S2(S)S7

**S13 1 S6(S)S7 [not relevant]**

S14 0 S12 AND S13

S15 12 S12

S16 9 RD (unique items)

S17 1 S16/2001:2004

S18 8 S16 NOT S17

**S19 8 Sort S18/ALL/PD,A [not relevant]**

S20 310 S7/AB, TI

S21 8 (S1 OR S2 OR S6) AND S20

S22 4 S21 NOT S15

**S23 3 RD (unique items)**

S24 1763311 CASH

S25 18 S7(10N)S24

S26 17 S25 NOT (S15 OR S21)

S27 8 RD (unique items)

S28 3 S27/2001:2004

**S29 5 S27 NOT S28 [not relevant]****23/8/1 (Item 1 from file: 275)**

DIALOG(R)File 275:(c) 2004 The Gale Group. All rts. reserv.

02178736 SUPPLIER NUMBER: 20636249 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Avoid the DOS Prompt! (the MultiRen utility that adds Multiple Rename to

Windows Explorer for renaming several files with a single command) (PC

Tech Utilities) (Product Information)

June 9, 1998

WORD COUNT: 3780 LINE COUNT: 00290

SPECIAL FEATURES: other; illustration

DESCRIPTORS: File Maintenance Utility; Product Application

PRODUCT/INDUSTRY NAMES: 7372530 (Disk/File Management Software)

SIC CODES: 7372 Prepackaged software

TRADE NAMES: MultiRen (File maintenance utility)--Usage; Microsoft Windows 95 (Operating system)--Computer programs; Microsoft Windows NT

4.0 (Operating system)--Computer programs

**23/3,AB,K/3 (Item 1 from file: 148)**

DIALOG(R)File 148:Gale Group Trade &amp; Industry DB

(c)2004 The Gale Group. All rts. reserv.

11146754      SUPPLIER NUMBER: 54994162      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Tightening security. (electronic commerce)**

Young, Kung  
Bunker, 149, 880, 67(1)  
June, 1999

ISSN: 0005-5395      LANGUAGE: English      RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 873      LINE COUNT: 00074

ABSTRACT: Four major security issues affect the conduct of electronic commerce. These are the lack of security services in the TCP/IP Internet protocol, the absence of authentication of parties, the predictability of TCP **sequence numbers** and the dangers of misconfigured systems, shoddy software and mismanagement. Security measures that are often used include firewalls, asymmetric systems and cryptography. However, each of these measures have their own weaknesses which make it harder to secure electronic commerce.

... of technologies: a screening router that screens different IP packets, judging whether the packets are **safe** enough to pass through the "walls". and a proxy server which performs a specific TCP...

(FILE 'HOME' ENTERED AT 16:29:01 ON 29 JAN 2004)

FILE 'CONFSCI' ENTERED AT 16:29:09 ON 29 JAN 2004

L1 10353 S NUMBER? OR NUMERAL? OR NUMERIC?  
L2 15333 S SEQUENC? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION?  
L3 21707 S DOUBLE OR PAIR OR PAIRS OR SET OR SETS OR ALTERNATE OR DIFFER  
L4 66441 S TWO OR 2  
L5 59008 S UPDAT? OR CHANG? OR ADVANC? OR FORWARD? OR FOLLOW?  
L6 10843 S SECUR? OR SURETY OR SAFEGUARD? OR PROTECT?  
L7 .27 S L1(2N)L2  
L8 0 S L7(3N)(L3 OR L4)  
**L9 2 S L5 AND L7 not relevant**

# Quicken Q

harvey harvey@greenwood.net  
Thu, 11 Nov 1999 13:19:38 -0500

- Previous message: [Tuning Pins](#)
- Next message: [Harpsichord info appreciated](#)
- Messages sorted by: [ date ] [ thread ] [ subject ] [ author ]

---

This brings up a good question. I've used both Quicken and QB, but it's been a while. So excuse me if I'm unclear on the details.

First, I agree that QB is more powerful than Quicken for business purposes. I'm also aware that the cash versus invoicing areas share the same customer database(?) However, when it comes to billing, a decision should be made between invoicing (billing) and cash sales, lest the process become overly complicated and really confusing. IIRC, there are two sets of sequential numbers assigned (defaulted) by the program... one for invoices and one for cash sales. This is where it gets tough.

If others are like me, invoice details are handwritten at the time of service on a separate billing form, and payment is received. Later, the details, as applicable, are recorded in QB -- in one place or another. I understand there are some who pre-print the invoice from QB, then write in additional details on-site. However, what if that call is cancelled for whatever reason? You end up with an assigned invoice or cash sale number, and no payment to coincide with it.

Eg, say there are four calls that day. Three are "cash" sales, and one is to be billed. Someone take it from there in terms of data entry into QB, and keeping the consecutive numbering sequence.

At 09:19 PM 11/10/99 -0700, you wrote:

>>Many technicians use Quicken, I think, and I'm trying it. I'm confused  
>>about entering income, however. The program presents an invoice form  
>>into which all sorts of things must be entered along with due date, etc.  
>>I'm mostly paid right after the job, so I'd just like to enter the  
>>amounts received each day and get it over with. Can anyone offer me some  
>>tips?  
>>  
>>Philip Jamison Pianos  
>>West Chester, PA  
>  
>I record all my income as cash sale, then you can make a deposit into  
>whatever account you have. I have quickbooks pro. I think it is the same.  
>  
>I don't bother with invoices, haven't bothered to learn the program well,  
>my wife could do it, she is an accountant, but all she looks at is my  
>profit and loss statement : ).  
>  
>"You are never alone or helpless, the force that guides the stars guides  
>you too." -P.R. Sarkar  
>

>

Jim Harvey, RPT  
Greenwood, SC  
[harvey@greenwood.net](mailto:harvey@greenwood.net)

---

Yes, I'm familiar with Brambach... why do you ask?  
-Jim Harvey, 1974

---

- Previous message: [Tuning Pins](#)
- Next message: [Harpsichord info appreciated](#)
- **Messages sorted by:** [\[ date \]](#) [\[ thread \]](#) [\[ subject \]](#) [\[ author \]](#)

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200407  
File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)  
Set Items Description  
S1 1510469 NUMBER??? OR NUMERAL? ? OR NUMERIC?  
S2 1006961 SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE-  
NT  
S3 3787108 DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?  
S4 969213 ALTERNATE OR DIFFERENT  
S5 2540545 TWO  
S6 9530277 2  
S7 2538031 UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?-  
??  
S8 1329894 SECUR??? OR SURETY OR SAFEGUARD??? OR PROTECT???

S9 20744 S1(2N)S2  
S10 46483 S1(2N)S3  
S11 18180 S1(2N)S4  
S12 6817 S1(2N)S5  
S13 26278 S1(2N)S6  
S14 1302 S9(3N)S10:S13  
S15 30 S14(5N)S7  
S16 4 S14(5N)S8  
S17 34 S15:S16  
S18 259652 IC=G06F-017  
S19 2 S17 AND S18  
S20 18276 IC=G07G-001  
S21 1 S17 AND S20  
S22 3 S19 OR S21  
S23 31 S17 NOT S22  
S24 8 S23/2001:2004  
S25 23 S23 NOT S24  
S26 54 S14 AND S18  
S27 5 S14 AND S20  
S28 4 S27 NOT S22:S23  
S29 52 S26 NOT (S22 OR S23 OR S27)  
S30 23 S29 AND S7:S8

**22/34/1 (Item 1 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
013632322 \*\*Image available\*\*  
WPI Acc No: 2001-116530/200113

**Management procedure for number information system has updating unit which updates numerical information by reading following numerical information that shows section information**

Patent Assignee: NTT DATA TSUSHIN KK (NITE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000339343	A	20001208	JP 99152691	A	19990531	200113 B

Priority Applications (No Type Date): JP 99152691 A 19990531

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2000339343	A	8	G06F-017/30	

Abstract (Basic): JP 2000339343 A

NOVELTY - A searching unit searches consecutive number

Serial 09//693563

January 29, 2004

information, a **group** corresponding to the **consecutive number** information, and a group designated **following** the issue demand of a number information. An updating unit updates numerical information by reading following numerical information which shows section information included in the number information.

**DETAILED DESCRIPTION** - The number information is immediately delivered from a first storing unit to a second storing unit. The first storing unit matches the numerical information that shows each section information and numerical information that shows following section information, and stores the numerical information to each section information arranged in predetermined order. The second storing unit stores numerical information that shows section information for possible updating included in the delivered number information. The consecutive number information are stored in group formed by the meeting of predetermined section information.

**USE** - For number information system used in processing registration information of motor vehicle.

**ADVANTAGE** - Improves efficiency of information processing required for generation of number information. Reduces load of information processing Database of large capacity becomes unnecessary. Improves search velocity of number information.

**DESCRIPTION OF DRAWING(S)** - The figure shows the block diagram of an information procedure included in a number information management system.

pp; 8 DwgNo 1/6

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-017/60

**22/7,K/2 (Item 1 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

07747970 \*\*Image available\*\*

RULED LINE DISPLAY DEVICE

PUB. NO.: 2003-241875 [JP 2003241875 A]

PUBLISHED: August 29, 2003 (20030829)

INVENTOR(s): OKAJIMA YOSHIO

APPLICANT(s): SHARP CORP

APPL. NO.: 2002-362770 [JP 2002362770]  
Division of 06-309239 [JP 94309239]

FILED: December 13, 1994 (19941213)

**ABSTRACT**

**PROBLEM TO BE SOLVED:** To provide a ruled line display device which can determine ruled line graphic data to be a change object or ruled line graphic data belonging to a group, and change a line style.

**SOLUTION:** The ruled line display device is constituted to have a ruled line storage means 108 which assigns group numbers to each of a plurality of ruled line graphic data and stores them by group, a number determination means 109 which determines by referring the ruled line storage means 108 whether the ruled line graphic data specified by pointing input belongs to a group number or not, and a ruled line reading means 110 which reads the ruled line graphic data **following** the determined **group number sequentially** from the ruled line storage means 108 and automatically changes them. Consequently, the ruled line graphic data to be changed or the ruled line graphic data belonging to a group number can be determined and the line style can be changed.

Serial 09//693563

January 29, 2004

COPYRIGHT: (C)2003,JPO  
INTL CLASS: G06F-003/00; G06F-017/21

**22/7,K/3 (Item 2 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

04772640 \*\*Image available\*\*

ARTICLE SALE REGISTRATION DATA PROCESSOR

PUB. NO.: 07-065240 [JP 7065240 A]

PUBLISHED: March 10, 1995 (19950310)

INVENTOR(s): YAMAGUCHI TAKEO

APPLICANT(s): TEC CORP [000356] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 05-214421 [JP 93214421]

FILED: August 30, 1993 (19930830)

ABSTRACT

PURPOSE: To determine and register data in various setting data tables more speedily and accurately.

CONSTITUTION: This processor is provided with address specification input means (20AR, 20AI, and 20AS), a specific address storage means 13RB, and step input control means (11 and 12), and each time data (link data) corresponding to a last determined and registered address ('1') are determined and registered, a next specific address ('3') among previously stored specific addresses ('1', '2', '3', '4', '5'...) is automatically inputted to an address buffer 13AB by skipping. Further, update input skip control means (11 and 12), etc., are provided to automatically **update** and input **serial - number** addresses ('1', '2', '3', '4',...) basically, and exclude the specific skip address ('2') and automatically update and input the next address ('3').

INTL CLASS: G07G-001/12

**25/26, TI/4 (Item 4 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009667770

WPI Acc No: 1993-361321/199346

**Security system controlling locking and unlocking of vehicle door or boot - uses transmitter with selectively actuated switches each representing function which emits output with unique identifying code**

**25/26, TI/5 (Item 5 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009452465

WPI Acc No: 1993-145990/199318

**Identification marking system e.g. for office equipment - includes ink layers burned by laser beam to produce indelible marking on surface of equipment**

**25/26, TI/7 (Item 7 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

007261170

WPI Acc No: 1987-258177/198737

**Decoding circuit for encoded TV signal transmission - includes analysis of shift between successive image lines in order to identify code used to**

Serial 09//693563

January 29, 2004

**control pattern of encoding sequence****25/26, TI/8 (Item 8 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.  
003621822

WPI Acc No: 1983-H0024K/198321

**Pseudo-random numbers generator - has outputs from first two M-sequence generators fed, via largest number selector, to next selector****25/7, K/1 (Item 1 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.  
012482838 \*\*Image available\*\*

WPI Acc No: 1999-288946/199925

**Numerically controlled machine tool**

Patent Assignee: INDEX WERKE GMBH &amp; CO HAHN &amp; TESSKY KG (HAHN )

Inventor: SCHISCHMANJAN S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applcat No Kind Date Week  
DE 19746130 A1 19990422 DE 1046130 A 19971018 199925 B

Priority Applications (No Type Date): DE 1046130 A 19971018

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

DE 19746130 A1 11 G05B-019/18

Abstract (Basic): DE 19746130 A1

**NOVELTY** - The machine tool has a number of relatively movable machining tools and a workpiece holder which are controlled via a numerical machine control (22), for sequential execution of numerical control sets, with measurement of the time span (SL) of each numerical control set, the **changing** time (SW) between **two successive numerical control sets** and the overall running time of the numerical control sets.

**DETAILED DESCRIPTION** - A control method for a numerically controlled machine tool is independently claimed.

**USE** - For machine tool with several sequential machining steps.

**ADVANTAGE** - Allows detection and elimination of delays in the machining program.

**DESCRIPTION OF DRAWING(S)** - The figure shows a schematic diagram of a numerically controlled machine tool.

Numerical machine control (22)

pp; 11 DwgNo 1/7

Derwent Class: P56; T06; X25

International Patent Class (Main): G05B-019/18

International Patent Class (Additional): B23Q-015/007

**25/7, K/2 (Item 2 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.  
011905010 \*\*Image available\*\*

WPI Acc No: 1998-321920/199828

**Servo controller for magnetic or magneto-optical disk used in computer system - has detector which detects servo information in readback signal received from head assembly**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: HETZLER S R; SERRANO L J  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
US 5757567 A 19980526 US 96598486 A 19960208 199828 B  
Priority Applications (No Type Date): US 96598486 A 19960208  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
US 5757567 A 15 G11B-005/09  
Abstract (Basic): US 5757567 A

The controller includes a servo assembly that moves a head assembly relative to the tracks of a disk (12). A detector detects the servo information in the readback signal received from the head assembly. A servo decoder (20) decodes the servo information received from the head assembly.

The servo information comprises a sequence of signal components that define a transition pattern corresponding to the track identification number, such that one magnetic flux transistor defines a bit of the track identifier number. **Only one bit of the track identification number changes from one track to the next and only one signal component transition of the servo information changes from one track to the next.**

ADVANTAGE - Preserves gray code property of only one single bit changing state between any two numbers in code sequence. Preserves necessary state transition polarity between code numbers, while requiring single transition for encoding each core bit. Improves code efficiency. Obtains track identification decoding with reduced error limits.

Dwg.1/9

Derwent Class: T03  
International Patent Class (Main): G11B-005/09

**25/7,K/3 (Item 3 from file: 350)**  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
010625458 \*\*Image available\*\*  
WPI Acc No: 1996-122411/199613

**Loop type network of split type - provides right to frame transmission using token which is passed between terminals, with token group number being changed sequentially NoAbstract**

Patent Assignee: HITACHI CABLE LTD (HITD )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No Kind Date Applcat No Kind Date Week  
JP 8018585 A 19960119 JP 94144566 A 19940627 199613 B  
Priority Applications (No Type Date): JP 94144566 A 19940627

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
JP 8018585 A 5 H04L-012/42  
Derwent Class: W01  
International Patent Class (Main): H04L-012/42

**25/7,K/9 (Item 9 from file: 350)**  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
003015581

WPI Acc No: 1981-B5592D/198108

**Polyphase frequency converter control - has amplitude of inverters input set during each interval with phase mismatch**

Patent Assignee: KALASHNIKOV B E (KALA-I)

Inventor: EPSHTEIN I I; KALASHNIKO B E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 731549	B	19800430				198108 B

Priority Applications (No Type Date): SU 2442475 A 19770117

Abstract (Basic): SU 731549 B

Improved voltage output waveshape of the polyphase thyristor frequency converter is due to the suppression of harmonics and ensuring a simultaneous decrease of intake power. Each of the n intervals of noncoincidence of output signals phase in the three-phase bridge inverters involves input amplitude change according to a law given by a formula. The latter relates the relative **change** of amplitude to the **serial number** p=1, 2 ...n of the interval.

The power section of the converter includes controlled rectifier (1) fed by the mains and self-commutated inverters (2) connected to three-phase load (3). The control is provided by master oscillator (4) and phase shifter (5) linked to pulse distributors (6). Switch (9) ensures stepwise setting of converter output amplitude as a function of signal from phase shifter (5). Bul.16/30.4.80

Derwent Class: X13

International Patent Class (Additional): H02P-013/16

**25/7,K/11 (Item 11 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

001522944

WPI Acc No: 1976-J5880X/197639

**Binary arithmetical logic unit - having new circuit design has fewer outlets and performs more operations**

Patent Assignee: AS UKR CYBERNETICS (AUCY-R)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 476578	A	19760326				197639 B

Priority Applications (No Type Date): SU 1896550 A 19730319

Abstract (Basic): SU 476578 A

The unit is designed for use as an element of specialised homogenous computing devices. It consists of a logic multiplication circuit, two half-adders, a result and a carry trigger, a separation circuit and a zero check circuit; its new circuit design has made it possible to reduce the number of outlet taps, and to perform all of the **following** operations: logic multiplication of **two binary numbers**, presented in **serial** code with the low digits **forward**, addition of the result of logic multiplication to the carries, obtained during the preceding time step, and to the serial code of a third number, storing the carries and the result for the duration of one time step in the presence of synchronising pulses at the appropriate input, as well as zero and sign check of the result.

Derwent Class: T01

International Patent Class (Additional): G06F-007/00

25/7,K/12 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

06396696 \*\*Image available\*\*

**CIPHER KEY FORMATION AND ENCRYPTION METHOD**

PUB. NO.: 11-338347 [JP 11338347 A]

PUBLISHED: December 10, 1999 (19991210)

INVENTOR(s): TSUKAMOTO KEIICHI

APPLICANT(s): HITACHI SOFTWARE ENG CO LTD

APPL. NO.: 10-149024 [JP 98149024]

FILED: May 29, 1998 (19980529)

**ABSTRACT**

PROBLEM TO BE SOLVED: To make illicit decipherment difficult and to make the high-speed processing with an electronic computer possible by forming two pseudo-random number sequences, changing the sequence of the one pseudo-random number sequence in accordance with the value of another pseudo-random number sequence and outputting the pseudo-random number sequence after a sequence change as a cipher key.

SOLUTION: The pseudo-random number RF is set at RX=RX0 for the purpose of initialization. The pseudo-random number RX is stored in an array element V[0] and a subscript I for storing the pseudo-random number RX formed in the subsequent processing into the array V is initialized to I=1 (S402, S403). The next pseudo-random number RX is calculated and is stored in the array element V[I] of the subscript I and further the subscript I of the array V for assigning the array element for storing the pseudo-random number RX to be calculated next is added (S404 to S406). A pointer P is positioned at the word at the top of plaintext/ciphertext data and the first/second pseudo-random number are calculated (S409). Next, the processing to obtain the agitation random numbers agitating the first pseudo-random number sequence is executed and Bellman processing is executed with the fetched pseudo-random number Rn as a key.

COPYRIGHT: (C)1999,JPO

25/7,K/14 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

04459891 \*\*Image available\*\*

**TWO-WAY SHIFT REGISTER**

PUB. NO.: 06-103791 [JP 6103791 A]

PUBLISHED: April 15, 1994 (19940415)

INVENTOR(s): YOSHIDA KATSUMASA

APPLICANT(s): YASKAWA ELECTRIC CORP [000662] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 04-249985 [JP 92249985]

FILED: September 18, 1992 (19920918)

**ABSTRACT**

PURPOSE: To obtain a two-way shift register which generates a random number sequence of two-way and can secure a random state of 2<sup>(supn)</sup>.

CONSTITUTION: When a control signal SL is at a high level, an output K1 of a combination logic circuit 3(sub 1) and output R0, R1 and R2 of D flip flop(F/F) 1(sub 0), 1(sub 1) and 1(sub 2) are respectively selected by selectors 2(sub 0), 2(sub 1), 2(sub 2) and 2(sub 3), and respectively inputted to F/F 1(sub 0), 1(sub 1), 1(sub 2) and 1(sub 3). And, when the control signal SL is at a low level, outputs R1, R2, and R3 of F/F 1(sub 1), 1(sub 2), and 1(sub 3), and outputs of a combination logic circuit 3(sub 2), are respectively selected by selectors 2(sub 0), 2(sub 1), and

2(sub 2), and respectively inputted to F/F 1(sub 0), 1(sub 1), and 1(sub 3). When the output R0-R3 are made a state of one before a stack state, output of exclusion OR circuits 4 and 7 are respectively inverted by exclusive OR circuit 6 and 9

**25/7,K/15 (Item 4 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

04342634 \*\*Image available\*\*

PASSWORD NUMBER INPUT DEVICE

PUB. NO.: 05-334334 [JP 5334334 A]

PUBLISHED: December 17, 1993 (19931217)

INVENTOR(s): KIJIMA KATSUHIRO

OKAMOTO TAKASHI

APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 04-141743 [JP 92141743]

FILED: June 02, 1992 (19920602)

ABSTRACT

PURPOSE: To obtain the password number input device which eliminates the danger that a password number is known to others even if the motion of the hand or arm of a user is viewed when the user inputs the password number and also has an regularity in the array of numerals for easier use.

CONSTITUTION: This password number input device has a numeral input means 3 for inputting the password number by moving the position of a specific **numeral sequence** or using a **numeral** input part 2 which can **change** the arrangement pattern of the numeral sequence, a **numeral sequence** display means 1 which displays a **numeral sequence** corresponding to the position of the numeral input part or the arrangement pattern, a determining means which determines the position or arrangement pattern of the **numeral sequence**, and a display control means which erases the displayed **numeral sequence** after the user displays the **numeral sequence** right and inputs the password number before use.

**25/7,K/16 (Item 5 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

03993344 \*\*Image available\*\*

DATA TRANSFER SYSTEM

PUB. NO.: 04-358444 [JP 4358444 A]

PUBLISHED: December 11, 1992 (19921211)

INVENTOR(s): KIMURA MEGUMI

SAGAWA KAZUHIRO

APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 03-133869 [JP 91133869]

FILED: June 05, 1991 (19910605)

ABSTRACT

PURPOSE: To obtain a transmission schedule with the small processing even if the distant side of communication changes the window size by securing the relationship between a window control area and a transmission data control area in a prescribed procedure.

CONSTITUTION: A window control area 11 controls the address of a window lower limit DT control area 12 where the correspondence is secured to the transmission data DT 13, the address of a (window upper limit-1) DT control area, the address of a final DT control area, the next draw-out sequence

number used for the window control, the modulo, the credit value, and the upper limit of transmission set for retransmission control respectively. In a data transfer system, the correspondence is secured between the window control and the transmission data based on the area 11, the correspondence procedure set between the transmission data and the window, the window size changing procedure, the sequence number adding procedure set to the transmission data, the window updating procedure set with reception of a confirm command given to the transmission data, and the retransmission procedure of the transmission data set when no confirm command is received within a fixed time.

**25/7,K/17 (Item 6 from file: 347)**

DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.  
03981069 \*\*Image available\*\*

**DATA PROCESSOR**

PUB. NO.: 04-346169 [JP 4346169 A]  
PUBLISHED: December 02, 1992 (19921202)  
INVENTOR(s): SATO HAI  
APPLICANT(s): DAIKIN IND LTD [000285] (A Japanese Company or Corporation),  
JP (Japan)  
APPL. NO.: 03-149812 [JP 91149812]  
FILED: May 23, 1991 (19910523)

**ABSTRACT**

PURPOSE: To obtain the data processor capable of maintaining the consistency of the outputted slips clearly at all times.

CONSTITUTION: Data of serial consecutive numbers to be set for each slip and updated for each output of the slip is recorded on a slip number gathering data recording part 31. An output control part 25 adds consecutive numbers on the slip based on the data recorded on the slip gathering number data recording part 31, and also adds the consecutive number of the slip on the data of the processing source to the slip when the slip is on the data after process. Thus, even when the slip is mixed after the slip output, the right time order of the slip and the order of data processing can be immediately confirmed on the slip.

**25/7,K/19 (Item 8 from file: 347)**

DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.  
03289096 \*\*Image available\*\*

DATA TRANSMISSION DEVICE FOR CENTRALIZED SUPERVISORY SYSTEM  
PUB. NO.: 02-264596 [JP 2264596 A]  
PUBLISHED: October 29, 1990 (19901029)  
INVENTOR(s): ARAKI JUNICHI  
APPLICANT(s): NISSIN ELECTRIC CO LTD [000394] (A Japanese Company or  
Corporation), JP (Japan)  
APPL. NO.: 01-085083 [JP 8985083]  
FILED: April 03, 1989 (19890403)

**ABSTRACT**

PURPOSE: To completely grasp the generation of state changes by adding a means to a terminal controller to transmit the generating order data every time a state change occurs and at the same time a means to a central supervisory controller to perform the comparison of the generating order data.

CONSTITUTION: A terminal controller RC actuates a counter 12 every time the state changes of terminal equipments TM1-TM3 are detected and sets the

Serial 09//693563

January 29, 2004

serial numbers of these state changes at an order storing part of information fields to send them to a data way DW. A central supervisory controller SCP receives the data from the controller RC and checks whether the received serial numbers have some omission or not. Thus it is possible to know that the state change data has no omission as long as the latest state order is set after preceding state change order and to detect the omission of the state change data if the latest state change order is skipped.

**25/7,K/20 (Item 9 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

02125344 \*\*Image available\*\*

BIDIRECTIONAL BLOCK CHAIN CONTROL SYSTEM

PUB. NO.: 62-042244 [JP 62042244 A]

PUBLISHED: February 24, 1987 (19870224)

INVENTOR(s): TAKASHI HITOSHI

APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 60-180923 [JP 85180923]

FILED: August 20, 1985 (19850820)

**ABSTRACT**

PURPOSE: To recover quickly the system fault of a file by providing two bidirectional block chains having a same structure and same contents in terms of a block structure and giving a time error to a switching process between both block chains.

CONSTITUTION: The mutual relation between both blocks serves as the data part of an index-based compiling file and the data record I is added under such conditions. Thus the 2nd block 2 unable to store the extra data any more and therefore has its division. Then a time error is given to the switching process between the primary and secondary block chains. In other words, both bidirectional block chains have different time points when the block contents are reflected on a file. Thus the primary bidirectional block chain is reflected when the 3rd block is secured. While the secondary bidirectional block chain is reflected when the 3rd block is completed. In such a way, the relative relation is **secured** among the blocks of **serial numbers** 1, 2 and 3 via said both bidirectional block chains.

**25/7,K/21 (Item 10 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

02071482 \*\*Image available\*\*

PICTURE MEMORY CONTROL SYSTEM

PUB. NO.: 61-285582 [JP 61285582 A]

PUBLISHED: December 16, 1986 (19861216)

INVENTOR(s): FUKUDA KOJI

HINO MASATOSHI

TABATA KUNIAKI

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 60-126026 [JP 85126026]

FILED: June 12, 1985 (19850612)

**ABSTRACT**

PURPOSE: To eliminate the need to use plural picture files and input devices and to attain a fade-in action by writing and displaying a memory plane which fetches picture data in response to the resolution of the A/D

conversion of a video signal and with control of the write timing.

CONSTITUTION: A memory buffer (memory plane) 12 of a picture processor which performs the fade-in/fade-out actions contains (n) pieces of areas (X'XY') having capacity corresponding to the display screen (XXY) of a CRT 7. These areas (X'XY') gives the D/A conversion to the picture data stored in the memory 12 and turns them into video signals for display. When the picture data are stored in the plane 12 consisting of (n) areas, the video signals of the picture read out of a picture file are turned into the picture data through the A/D conversion performed with n-bit resolution. This picture data is written to each area corresponding to the contents of (n) bits. The luminance of each picture element is shown by each bit and the depth direction of the luminance is defined as the plane numbers. The fade-in/fade-out actions are carried out by fetching and displaying **successively** plane numbers 1, 2, 3- and **changing** the rate of luminance between two screens.

**25/7,K/23 (Item 12 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

01188539 \*\*Image available\*\*

CODE CONVERTER

PUB. NO.: 58-125939 [JP 58125939 A]

PUBLISHED: July 27, 1983 (19830727)

INVENTOR(s): TAKESHITA KAZUYUKI

HIRANO YASUHIRO

APPLICANT(s): HITACHI DENSHI LTD [000542] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 57-007561 [JP 827561]

FILED: January 22, 1982 (19820122)

ABSTRACT

PURPOSE: To keep a DC balance by means of the redundancy of ternary recording and to lower the recording frequency to improve the S/N, by having a special structure with the same number of digits secured between +1 and -1 for a code consisting of (m) digits.

CONSTITUTION: The input binary signals (binary codes) a1 are transferred successively by a clock C1 and a shift register 1, and a parallel data a2 of the prescribed bit is delivered and latched to a latch 3 with a clock C2 which is divided by a counter 2 that is reset with a synchronizing signal s1. The output of the latch 3 is applied to upper and lower ROM4 and 5, respectively, and the outputs of ROM4 and 5 are applied in parallel to shift registers 6 and 7. The outputs of registers 6 and 7 are converted into voltage waveforms by logic voltage converters 8 and 9 and then converted into ternary codes by a subtractor (adder) circuit 10. The same number of digits are **secured** between +1 and -1 with **2 consecutive numbers** of +1 and -1 for the constitution of a code. At the same time, the continuation of +1 or -1 is avoided at both sides of the code. In such a way, the S/N is improved.

**28/7,K/2 (Item 1 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

04732049 \*\*Image available\*\*

METHOD FOR DETECTING OMISSION/OVERLAP OF CONSECUTIVE NUMBER DATA

PUB. NO.: 06-203049 [JP 6203049 A]

PUBLISHED: July 22, 1994 (19940722)

INVENTOR(s): SATO MARI

APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 04-313879 [JP 92313879]  
FILED: November 25, 1992 (19921125)

ABSTRACT

PURPOSE: To improve reliability for the detection of disarrangement by accomplishing a first record which detects the existence of the disarrangement in **consecutive number** data, generating a second record setting the consecutive data with disarrangement as an initial value, and continuing the update of the second record as far as no disarrangement occurs in the consecutive data.

CONSTITUTION: A **consecutive number** flag setting area 2 as an omission/overlap table and an overlap flag setting area 3 are generated, and the consecutive number flag setting area 2 and the overlap flag setting area 3 are initialized when the detection of the omission/overlap of the consecutive number data 1 is started, and each consecutive number flag and overlap flag are set at 0. Thence, a record 4a with young managing order is read out, and when the **consecutive number** data 1 exists, the **consecutive number** flag is set at 1 at every **consecutive number** 1 if the **consecutive number** flag setting area 2 shows 0. When the **consecutive number** flag setting area 2 shows 0, the **consecutive number** flag is set at 1. When the **consecutive number** flag setting area shows 1, the overlap flag setting area 3 is set at 1. When processing is performed by reading out the record 4a, 1 is set on the **consecutive number** flag setting area 2 and the **consecutive number** flag setting areas with **consecutive numbers** 0-16. Also, the next records 4b, 4c are processed.

INTL CLASS: G06F-015/21; G06F-011/00; G06F-013/00; G07G-001/14

28/7,K/3 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.

03825396 \*\*Image available\*\*

ARTICLE SALES DATA PROCESSOR

PUB. NO.: 04-190496 [JP 4190496 A]  
PUBLISHED: July 08, 1992 (19920708)

INVENTOR(s): OSAWA HIDEAKI

APPLICANT(s): TOKYO ELECTRIC CO LTD [000356] (A Japanese Company or  
Corporation), JP (Japan)

APPL. NO.: 02-322034 [JP 90322034]  
FILED: November 26, 1990 (19901126)

ABSTRACT

PURPOSE: To promote sale by detecting the **serial transaction number** of one transaction in a adjustment process after sold articles are registered, automatically judging whether or not there is a privilege in the transaction, and eliminating a trouble time and improving the certainty.

CONSTITUTION: Transaction serial numbers and corresponding discount rates are set previously in a special reduction table 27 before a stored is opened. After the store is opened, sale registration is performed by exactly the same key operation as before and each customer is given a **serial transaction number**. When this **serial number** matches with a **number** set in the table 27, the total amount of money of the customer is automatically discounted. Thus, the privilege like lottery is given by using the **serial transaction numbers**, and the sale is promoted consequently. Further, neither clerks nor customers need not confirm the transaction numbers on issued receipts, so the trouble is eliminated and the privilege can securely be given.

INTL CLASS: G07G-001/12

28/7,K/4 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

03524096 \*\*Image available\*\*

POINT-OF-SALE INFORMATION CONTROL SYSTEM

PUB. NO.: 03-186996 [JP 3186996 A]

PUBLISHED: August 14, 1991 (19910814)

INVENTOR(s): SUGIMOTO MASAHIKO

APPLICANT(s): TOKYO ELECTRIC CO LTD [000356] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 01-325887 [JP 89325887]

FILED: December 18, 1989 (19891218)

ABSTRACT

PURPOSE: To lighten alteration work by clearing and resetting automatically the other set contents of a set memory by a setting replacement command and reset data from a terminal controller while a part of the set memory such as a **serial number** counter, a terminal **number** set memory, and an accounts settling counter, etc., is left as it is.

CONSTITUTION: When the setting replacement command and the reset data are sent from the terminal controller to terminals 4(sub 1) to 4(sub n), the terminals 4(sub 1) to 4(sub n) clear all the set contents of the other memory parts while leaving the serial number counter 432, the terminal number set memory 433, and the accounts settling counter 434 in the set memory 43A as they are. Then, they reset cleared memory areas based on the set data. Thus, the resetting of the set memory 43A can be executed automatically without being accompanied with manual operation

INTL CLASS: G07G-001/14

30/26, TI/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015765884

WPI Acc No: 2003-828086/200377

Control method enabling IC operation mode with uncertainty - generate one-time Generic Random Number in IC's Random Number pool during first IC operation and Run-Time Random Number for each IC operation

30/26, TI/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015649622

WPI Acc No: 2003-711805/200367

Electronic interactive entertainment system, has processor for selecting sequentially numbered subsets according to number produced by random generator and showing numbered video sequences of selected subset on display

30/26, TI/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015553008

WPI Acc No: 2003-615163/200358

Method for dynamically establishing fast index - realizes a function of selecting arbitrary subsets of a database

Serial 09//693563

January 29, 2004

**30/26, TI/6 (Item 6 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015494778

WPI Acc No: 2003-556925/200352

**Query message processing method using Internet, involves extracting queries from query messages received from users, and sending extracted queries, count value of queries and assigned sequence number, to search engine**

**30/26, TI/7 (Item 7 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015491652

WPI Acc No: 2003-553799/200352

**Cross-referencing method of reference manuals, involves placing sequential numbers and letters referring various portions of particular area of reference work in other area for forward and backward cross referencing**

**30/26, TI/9 (Item 9 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015139347

WPI Acc No: 2003-199874/200319

**Pointerless binary decision diagram package for electronic design automation tools, includes graph nodes identification arrangement which assigns consecutive integer numbers to different nodes**

**30/26, TI/12 (Item 12 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014580391

WPI Acc No: 2002-401095/200243

**Apparatus and method for system security using refractive index of light**

**30/26, TI/13 (Item 13 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014482349

WPI Acc No: 2002-303052/200234

**Assembled products management method involves assigning different serial numbers to separate products and parts even if they have similar structure**

**30/26, TI/14 (Item 14 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014269399

WPI Acc No: 2002-090097/200212

**Segmenting text element stream into clauses by use of token or text structure marker**

**30/26, TI/15 (Item 15 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
014038395

WPI Acc No: 2001-522608/200157

**Determining nucleotide sequence signature, by obtaining optical values for each nucleotide position in a group, adjusting them to get ratio of final highest values near predetermined factor, generating base call**

**30/26, TI/16 (Item 16 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
013319263

WPI Acc No: 2000-491202/200043

**Method for describing, storing and transferring alignment information, particularly for proteins and nucleic acids, by separation into gap and sequence information**

**30/26, TI/21 (Item 21 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
010403671

WPI Acc No: 1995-304985/199540

**Design information management method for designing of electronic components - involves searching component list corresponding to serial number from product type specified and information about components from material information database**

**30/7, K/2 (Item 2 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
015724451 \*\*Image available\*\*

WPI Acc No: 2003-786651/200374

**Video game program for role playing game, sets numerical value displayed at display timing that coincides with operating input timing of player as control value**

Patent Assignee: SQUARE KK (SQUA-N); SQUARE CO LTD (SQUA-N)

Inventor: KAWAZU A

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020137564	A1	20020926	US 2001977460	A	20011016	200374 B
JP 2002282540	A	20021002	JP 200187449	A	20010326	200374

Priority Applications (No Type Date): JP 200187449 A 20010326

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020137564	A1	21	G06F-017/00	
JP 2002282540	A	13	A63F-013/00	

Abstract (Basic): US 20020137564 A1

NOVELTY - The video game program has instructions for sequentially displaying different numerical values repeatedly on the screen.

The display timing of each numerical value to be displayed is compared with operation input timing of player. The numerical value displayed at displaying timing that coincided with operating input timing is set as control value based on comparison result.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following :

- (1) recorded medium storing video game program;
- (2) control value setting method; and
- (3) game machine.

USE - For role playing games (RPG).

ADVANTAGE - Enables a player to be involved in numerical setting of a control value for controlling developments of RPG.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining video game program.

pp; 21 DwgNo 2/12

Derwent Class: P36; T01; W04

International Patent Class (Main): A63F-013/00; G06F-017/00

International Patent Class (Additional): A63F-013/10

**30/7,K/3 (Item 3 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015685585 \*\*Image available\*\*

WPI Acc No: 2003-747774/200370

**Input/output information writing method in storage area network, involves writing entries from data log, starting from merge fence set to lowest group sequence number, and incrementing merge fence after each write operation**

Patent Assignee: ELKINGTON S (ELKI-I); HESS R (HESS-I); KORGAONKAR A

(KORG-I); LEVEILLE J (LEVE-I); LUBBERS C (LUBB-I); MCCARTY J (MCCA-I); SICOLA S J (SICO-I)

Inventor: ELKINGTON S; HESS R; KORGAONKAR A; LEVEILLE J; LUBBERS C; MCCARTY J; SICOLA S J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030187947	A1	20031002	US 2002106907	A	20020326	200370 B

Priority Applications (No Type Date): US 2002106907 A 20020326

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

US 20030187947	A1	19	G06F-015/16	
----------------	----	----	-------------	--

Abstract (Basic): US 20030187947 A1

NOVELTY - A data log is generated in response to failure of destinations in a storage network. Each input/output (I/O) information received from a host computer, is assigned a **group sequence number** (GSN) that is stored. A merge fence is set to the lowest GSN of the destination databases. The entries are written from the data log, starting from the merge fence. The merge fence is incremented after each write operation is completed.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for computer program product comprising machine readable medium storing input/output information writing program.

USE - For managing writing of input/output information during data merging in storage area network.

ADVANTAGE - Maintains redundant data storage sets in the storage area network at remote locations and utilizes the storage area network for writing information. Provides **security** to the written information with higher reliability.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart illustrating the input/output information writing method.

pp; 19 DwgNo 9/10

Derwent Class: T01; U13

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-007/00; G06F-012/00;  
**G06F-017/30**

**30/7,K/8 (Item 8 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
015264100 \*\*Image available\*\*  
WPI Acc No: 2003-325029/200331

**Surface attachment processing method for digital plate making, involves obtaining page set data for generating record consecutive number value added to each record**

Patent Assignee: DAINIPPON PRINTING CO LTD (NIPQ )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2003099423	A	20030404	JP 2001291226	A	20010925	200331 B

Priority Applications (No Type Date): JP 2001291226 A 20010925

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2003099423	A	5	G06F-017/21	

Abstract (Basic): JP 2003099423 A

**NOVELTY** - Parameters e.g. surface attachment form, number of vertical and horizontal surface attachments, and the maximum thrust through **numbers** are set up. The **consecutive number** value for surface attachment to the page set data is generated based on the set-up parameter. Page set data, used for generating record consecutive number value added to each record, is obtained.

**DETAILED DESCRIPTION** - The consecutive number and total number of records are added to each record to acquire the page set data.

**USE** - For digital plate making.

**ADVANTAGE** - Reduces development cost since developing process is made unnecessary even if the items differ.

**DESCRIPTION OF DRAWING(S)** - The figure shows the mode of **change** of a page set data based on the surface attachment processing method. (Drawing includes non-English language text).

pp; 5 DwgNo 3/5

Derwent Class: P74; T01; W02

International Patent Class (Main): **G06F-017/21**

International Patent Class (Additional): B41C-001/00; H04N-001/387

**30/7,K/10 (Item 10 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
014970385

WPI Acc No: 2003-030899/200303

**Object-unique identification method**

Patent Assignee: DU L (DULL-I)

Inventor: DU L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1366257	A	20020828	CN 2002101902	A	20020109	200303 B

Priority Applications (No Type Date): CN 2002101902 A 20020109

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CN 1366257	A		G06F-017/22	

Abstract (Basic): CN 1366257 A

NOVELTY - The invention relates to a unique method for identifying an object. The identifier is composed of 6 groups of letters and 1 group of Arabic numerals. Concept and object represented by these identifiers constitutes labeled essential elements of unique identifier of object. The invention makes natural person, family, juridical person, merchandise, literature, patent etc. possess unique identifier, providing a feasible method to discriminate whether the object is in true or false status. The **following** is relation of permutation and combination of label symbol L:Cc Kk Mm Pp Ss Uu Vv Ww Xx Yy, L1:C K M P S U V W X Y; L2:c k m p s u v w x y; J:Qq Aa Bb Nn Dd Ee Ff Gg Hh Rr; J1:Q A B N D E F G H R; J2: q a b n d e f g h r; I: 0 1 2 3 4 5 6 7 8 9. Tactic coincidence relation defined by algebra exists between each letter in letter L and J **groups** and Arabic **numerals**. Membership **sequence** and handling relation sequence of these letters are L-L1-L2-J-JI-J2-1. usage of letters conforms to rules of decimal system L=J=at I=hash . The concept of uniquely identifying an object is represented by OLJI or O- at hash .

DwgNo 0/0

Derwent Class: T01; U21

International Patent Class (Main): G06F-017/22

International Patent Class (Additional): G06F-017/30

30/7,K/11 (Item 11 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014968491 \*\*Image available\*\*

WPI Acc No: 2003-029005/200302

**Multi-processor system for high performance data processing, retrieves sending sequence number, by consulting table storing series of sequence number associated with prior message**

Patent Assignee: HEWLETT-PACKARD CO (HEWP ); TSAO J S (TSAO-I); WARNER C W (WARN-I); HEWLETT-PACKARD DEV CO LP (HEWP )

Inventor: TSAO J S; WARNER C W

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020129029	A1	20020912	US 2001803519	A	20010309	200302 B
JP 2002373158	A	20021226	JP 200258873	A	20020305	200314
US 6615221	B2	20030902	US 2001803519	A	20010309	200359

Priority Applications (No Type Date): US 2001803519 A 20010309

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020129029	A1	12		G06F-007/00	
JP 2002373158	A	11		G06F-015/177	
US 6615221	B2			G06F-017/30	

Abstract (Basic): US 20020129029 A1

NOVELTY - A database unit creates a database entry corresponding to a transaction request that is associated with a destination address. A retrieving unit retrieves sending **sequence numbers** by consulting the table storing **series** of **sequence numbers** that is associated with prior message to component. A transmitter transmits transaction message comprising **sequence number** and destination address.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the **following** :

(1) Data communication method; and

(2) Bridging unit.

USE - Multi-processor system for high performance data processing.

ADVANTAGE - Reduces latency caused in functionality of hardware and provides superior data communication performance. Enables reliable transport protocol for systems with improved efficiency.

DESCRIPTION OF DRAWING(S) - The figure illustrates an explanatory topology of multicontroller system.

pp; 12 DwgNo 4/7

Derwent Class: T01; U13; U14; W01

International Patent Class (Main): G06F-007/00; G06F-015/177; **G06F-017/30**

International Patent Class (Additional): G06F-013/00; G06F-015/163;

H02H-003/05; H04L-012/56

**30/7,K/17 (Item 17 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012578720 \*\*Image available\*\*

WPI Acc No: 1999-384827/199932

**Electronic serial number assigning system for RF devices such as electronic price label**

Patent Assignee: NCR CORP (NATC )

Inventor: ADAMEC A J; GOODWIN J C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5917422	A	19990629	US 97882775	A	19970710	199932 B

Priority Applications (No Type Date): US 97882775 A 19970710

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5917422	A	5	G06F-017/00	

Abstract (Basic): US 5917422 A

NOVELTY - A holding area (14) divides the RF devices group into two other groups. A transmitter (34) within an isolation chamber (20) programs an RF device within the latter group with an electronic **serial number** which is **different** from the existing number and the number to follow within the same group.

DETAILED DESCRIPTION - The holding area is external to an initial isolation chamber (12) having a transmitter (30) which programs the original group of RF devices including an RF device with the initial serial number. The RF device is an electronic price label. A controller (26) is coupled to the transmitters which transmit programming instructions to the RF devices within the respective group. An INDEPENDENT CLAIM is also included for the method of assigning electronic serial number to RF devices.

USE - For assigning unique serial numbers to RF devices such as electronic price label (EPL).

ADVANTAGE - The EPLs are assigned with unique serial numbers without having to isolate the EPLs from each other, thereby minimizing the cost and handling associated with the method.

DESCRIPTION OF DRAWING(S) - The figure depicts the electronic serial number assigning system.

Isolation chambers (12,20)

Holding area (14)

Controller (26)

Transmitter (30,34)

pp; 5 DwgNo 1/1

Derwent Class: T01  
International Patent Class (Main): G06F-017/00

30/7,K/18 (Item 18 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
012537087 \*\*Image available\*\*  
WPI Acc No: 1999-343193/199929

Manufacture log management apparatus for collecting required data for a specific component or product based on a desired attribute - has log unit that takes log which matches combination of corresponding set serial number of manufacturer and auto-process identifier

Patent Assignee: FUJITSU LTD (FUIT )  
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11126222	A	19990511	JP 97289747	A	19971022	199929 B

Priority Applications (No Type Date): JP 97289747 A 19971022

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
JP 11126222 A 17 G06F-017/60

Abstract (Basic): JP 11126222 A

NOVELTY - A log unit (13) takes the log which matches the combination of the corresponding set manufacturer's **serial number** and an auto-process identifier. DETAILED DESCRIPTION - Process link memory units (11) store the process link information which consists of a row of identifiers for individual processes along the flow of a production line. Setting units (12) provide the manufacturer's **serial number** for each individually manufactured product. The set manufacturer's **serial number** is combined with the supplied identifier about each process.

USE - For collecting required data for a specific component or product based on a desired attribute.

ADVANTAGE - Improves reliability of quality data and enhances manufacture efficiency. Manufactures product with high precision.

Secures high compatibility in a multi-variety job production due to reliable collection of quality information. DESCRIPTION OF DRAWING(S) - The figure shows the principle block diagram of the manufacture log management apparatus. (11) Process link memory unit; (12) Setting unit; (13) Log unit.

Dwg.1/11

Derwent Class: P56; T01; T06

International Patent Class (Main): G06F-017/60

International Patent Class (Additional): B23Q-041/08; G05B-015/02

30/7,K/19 (Item 19 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
011895816 \*\*Image available\*\*  
WPI Acc No: 1998-312726/199827

Random number token sequence method for electronic payments - involves user purchasing set of number sequences derived from random number and using these via merchant for payments

Patent Assignee: BRITISH TELECOM PLC (BRTE )

Inventor: HILL J

Number of Countries: 079 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9822915	A1	19980528	WO 97GB3116	A	19971112	199827 B
AU 9749571	A	19980610	AU 9749571	A	19971112	199843
EP 941524	A1	19990915	EP 97912336	A	19971112	199942
			WO 97GB3116	A	19971112	
JP 2001504612	W	20010403	WO 97GB3116	A	19971112	200126
			JP 98523322	A	19971112	
US 6236981	B1	20010522	US 97972013	A	19971117	200130
EP 941524	B1	20030416	EP 97912336	A	19971112	200328
			WO 97GB3116	A	19971112	
DE 69721038	E	20030522	DE 621038	A	19971112	200341
			EP 97912336	A	19971112	
			WO 97GB3116	A	19971112	

Priority Applications (No Type Date): GB 9624127 A 19961120

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9822915	A1	E	36 G07F-007/08	Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
				Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
AU 9749571	A		G07F-007/08	Based on patent WO 9822915
EP 941524	A1	E	G07F-007/08	Based on patent WO 9822915
				Designated States (Regional): DE ES FR GB NL
JP 2001504612	W	40	G06F-019/00	Based on patent WO 9822915
US 6236981	B1		G06F-017/60	
EP 941524	B1	E	G07F-007/08	Based on patent WO 9822915
				Designated States (Regional): DE ES FR GB NL
DE 69721038	E		G07F-007/08	Based on patent EP 941524
				Based on patent WO 9822915

Abstract (Basic): WO 9822915 A

The network system, e.g. Internet, includes a method for a user to pay for services from a merchant. The user pays the payment service (600) for a set of digitally encoded random numbers. These are derived from a **sequence of random number** held in the payment server. When the user (100) wishes to pay a merchant (500) for a server, a suitable payment token is transferred. The merchant **forwards** the token to the payment server for verification and payment.

A user PIN may be used to further encode the **number sequences**. A window may be used to allow payments to arrive out of sequence. If the unused tokens are lost, they can be re-created.

ADVANTAGE - Provides a simple and robust method of paying for Internet services.

Dwg.1/10

Derwent Class: T05; W01

International Patent Class (Main): G06F-017/60 ; G06F-019/00; G07F-007/08

International Patent Class (Additional): G06F-007/10; G07F-007/10

30/7,K/20 (Item 20 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010951878 \*\*Image available\*\*

WPI Acc No: 1996-448828/199645

Mfd. prod. change log management system - uses data processor to which

**memory that stores list describing substrate serial number and set serial number of mfd. prod., input, output and display units are connected**

Patent Assignee: SONY CORP (SONY )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8222887	A	19960830	JP 9546254	A	19950211	199645 B

Priority Applications (No Type Date): JP 9546254 A 19950211

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8222887	A	15	H05K-013/00	

Abstract (Basic): JP 8222887 A

The system uses a memory (5) that stores the list describing the substrate serial number of a mount substrate and the **set serial number** for every **set** of a predetermined model. A prodn. lot item file (6) describes the lot prodn. day of a predetermined mount substrate and the substrate serial number. A prodn. program **change** log file (7) describes the substrate prodn. program **change** day of the mfr. **change** connection document number of a predetermined mount substrate.

A mount substrate mfr. **change** connection document file (15) describes the mfr. **change** connection document number of a predetermined mount substrate, the contents of the mfr. **change** and the mfr. **change** connection document generation date. The memory, an input unit (2), an output unit (4) and a display unit (3) are all connected to an on-line data processor (1).

**ADVANTAGE** - Ensures speedy poor log countermeasure since poor log is easily searched by adding database of several files. Reduces modification work or precision improvement due to speedy poor log countermeasure. Ensures quick discovery of poor substrate generation in market and determines its exact countermeasure.

Dwg.1/10

Derwent Class: P56; T01; V04

International Patent Class (Main): H05K-013/00

International Patent Class (Additional): B23P-021/00; B23Q-041/08;

G06F-017/60

**30/7,K/22 (Item 1 from file: 347)**

DIALOG(R) File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

05772255 \*\*Image available\*\*

ROUTINE DOCUMENT PREPARING AND PRESERVING METHOD

PUB. NO.: 10-055355 [JP 10055355 A]

PUBLISHED: February 24, 1998 (19980224)

INVENTOR(s): SHIMADA YURI

APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 08-210130 [JP 96210130]

FILED: August 08, 1996 (19960808)

**ABSTRACT**

**PROBLEM TO BE SOLVED:** To provide the routine document preparing and preserving method which can prevent a field format a routine document from being destroyed when a routine document is newly prepared, automate part of manual operation, and prevent a prepared routine document form being lost.

**SOLUTION:** A document file name specified at the time of registration and preserving in routine document formats 20 and 21 is provided with a

document **serial-number** area by document classifications, and when the format 21 or routine document 23 is read to newly prepare a routine document 23, a document **serial number** corresponding to a document classification is automatically embedded in the document serial-number area. The document serial number embedded in the document **serial - number** area is **set** to the **number** (plus 1) right after the maximum document number read out of the routine document file storage area 24 where the routine document 23 is preserved. When the document serial number is automatically embedded in the document serial- number area, a zero-byte document is registered in the routine document file preserving area 24 and **updated** when a newly prepared routine document is registered.

INTL CLASS: **G06F-017/21**

**30/7,K/23 (Item 2 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

05267387 \*\*Image available\*\*

SYSTEM FOR MANAGING PRODUCT MANUFACTURING **CHANGE** HISTORY AND DEFECT HISTORY

PUB. NO.: 08-222887 [JP 8222887 A]

PUBLISHED: August 30, 1996 (19960830)

INVENTOR(s): NOJI JUNKO

MINATO HIROMI

APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 07-046254 [JP 9546254]

FILED: February 11, 1995 (19950211)  
**ABSTRACT**

PURPOSE: To provide a system for managing a product manufacturing **change** history and a defect history which can retrieve the product manufacturing **change** history and defect history for every set or mounted substrate.

CONSTITUTION: A system for managing a product manufacturing **change** history and a defect history is provided with a data processing means 1 and an input means 2, a displaying means 3, an output means 4, and a storing means which are connected to the means 1 in on-line states and the storing means stores a file 5 in which the **serial numbers** of **sets** and substrates are described, a production lot breakdown file 6 in which the manufacturing dates of substrates lots and serial numbers of substrates are described, a substrate production program **change** history file 7, a manufacturing substrate **change** memorandum file 15, and a defect history file 18 in which a defect history or a defective substrate history are described for every set. Since the file in which the **serial numbers** of **sets** are correlated with the serial numbers of substrates is provided, the product manufacturing **change** history and the defect history can be retrieved for every set of machines and every substrate.

INTL CLASS: H05K-013/00; B23P-021/00; B23Q-041/08; **G06F-017/60**

Serial 09//693563

January 29, 2004

File 348:EUROPEAN PATENTS 1978-2004/Jan W04

File 349:PCT FULLTEXT 1979-2002/UB=20040122,UT=20040115

Set	Items	Description
S1	954351	NUMBER??? OR NUMERAL? ? OR NUMERIC?
S2	762217	SEQUENC??? OR SEQUENT? OR SERIAL? OR CONSECUTIV? OR SUCCESSION? ? OR SUCCESSIVE? OR SUBSEQUENT OR SUCCEED??? OR SUCCEDE-NT
S3	1223179	DOUBLE OR PAIR? ? OR SET OR SETS OR SERIES OR GROUP? ?
S4	898286	ALTERNATE OR DIFFERENT
S5	1173825	TWO
S6	1718907	2
S7	1624656	UPDAT??? OR CHANG??? OR ADVANC??? OR FORWARD??? OR FOLLOW?-???
S8	651452	SECUR??? OR SURETY OR SAFEGUARD??? OR PROTECT???
S9	41685	IC=G06F-017
S10	769	IC=G07G-001
S11	79570	S1(2N)S2
S12	66097	S1(2N)S3
S13	90779	S1(2N)S4
S14	21752	S1(2N)S5
S15	85107	S1(2N)S6
S16	6442	S11(3N)S12:S15
S17	340	S16(5N)S7
S18	65	S16(5N)S8
S19	15	S17(S)S18
S20	1	<b>S19 AND S9:S10</b>
S21	14	<b>S19 NOT S20</b>
S22	28	S17:S18 AND S9:S10
S23	27	<b>S22 NOT S19</b>
S24	43	S17/AB,CM
S25	39	<b>S24 NOT (S19 OR S22)</b>

**20/3/1 (Item 1 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00806382

**METHOD FOR AFFORDING A MARKET SPACE INTERFACE BETWEEN A PLURALITY OF MANUFACTURERS AND SERVICE PROVIDERS AND INSTALLATION MANAGEMENT VIA A MARKET SPACE INTERFACE**

**PROCEDE DE MISE A DISPOSITION D'UNE INTERFACE D'ESPACE DE MARCHE ENTRE UNE PLURALITE DE FABRICANTS ET DES FOURNISSEURS DE SERVICES ET GESTION D'UNE INSTALLATION VIA UNE INTERFACE D'ESPACE DE MARCHE**

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US  
(Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US,

Legal Representative:

HICKMAN Paul L (et al) (agent), Oppenheimer Wolff & Donnelly LLP, 1400 Page Mill Road, Palo Alto, CA 94304, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200139028 A2 20010531 (WO 0139028)

Application: WO 2000US32308 20001122 (PCT/WO US0032308)

Priority Application: US 99444773 19991122; US 99444798 19991122

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK

Serial 09//693563

January 29, 2004

LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG UZ VN YU ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 170977

Main International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

**21/3,AB,K/1 (Item 1 from file: 348)**

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00683557

Resource access control system.

Quellenzugriffskontrollsysteem.

Systeme de commande d'accès aux ressources.

PATENT ASSIGNEE:

AT&amp;T Corp., (589370), 32 Avenue of the Americas, New York, NY 10013-2412,

(US), (applicant designated states: DE;ES;FR;GB)

INVENTOR:

Rangachar, Hemmige Venkata, 6 Somer Court, Millstone, N.J. 07726, (US)

LEGAL REPRESENTATIVE:

Harding, Richard Patrick et al (41294), Marks & Clerk, Alpha Tower,  
Suffolk Street Queensway, Birmingham B1 1TT, (GB)

PATENT (CC, No, Kind, Date): EP 653868 A2 950517 (Basic)

EP 653868 A3 951102

APPLICATION (CC, No, Date): EP 94308082 941102;

PRIORITY (CC, No, Date): US 152993 931112

DESIGNATED STATES: DE; ES; FR; GB

INTERNATIONAL PATENT CLASS: H04M-003/42; H04M-003/38; H04M-003/36;

H04Q-003/00; H04M-003/22;

ABSTRACT EP 653868 A2

Access of a user to a resource, such as a telecommunications network, includes storing, in a first call data base, a first set of attributes concerning an ongoing call from a caller. A second call data base stores a second set of attributes concerning the history of prior calls made by the caller. A rules data base stores rules concerning attributes for determining whether to disconnect the call, block future calls, or take other action. A determination is made whether data in at least one of the call data bases matches the rules in the rules data base. The call is then disconnected, the next call blocked, or other action is taken, in response to a match between data in the call data bases and data in the rules data base. Preferably, the second call data base is updated in response to matches with the rules data base. (see image in original document)

ABSTRACT WORD COUNT: 154

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1310
SPEC A	(English)	EPAB95	6031
Total word count - document A			7341
Total word count - document B			0

Total word count - documents A + B 7341

... CLAIMS Using a bad ANI,  
- Of short duration,  
- Using repeated ANI,  
- From non-frequent accessor,  
- To successive different dialed numbers , Using suspected  
patterned dialing,  
- With a connect time difference using a less than PDD (Post...  
events,  
- Authorization codes from detected fraud events,  
- Other files as required by CSAM (Telephone Corporation Security  
Administration Monitor).

13. A system as in claim 11 or claim 12, wherein the control...

**21/3, AB/2 (Item 2 from file: 348)**

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.  
00306062

Digital data processing system.

Digitales Datenverarbeitungssystem.

Système du traitement de données numériques.

PATENT ASSIGNEE:

DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581  
, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

Bratt, Richard Glenn, 9 Brook Trail Road, Wayland Massachusetts 01778, (US)  
Clancy, Gerald F., 13069 Jaccaranda Center, Saratoga California 95070, (US)

Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773,  
(US)

Gruner, Ronald Hans, 112 Dublin Wood Drive, Cary North Carolina 27514, (US)  
Mundie, Craig James, 136 Castlewood Drive, Cary North Carolina, (US)

Schleimer, Stephen I., 1208 Ellen Place, Chapel Hill North Carolina 27514  
, (US)

Wallach, Steven J., 12436 Green Meadow Lane, Saratoga California 95070,  
(US)

LEGAL REPRESENTATIVE:

Robson, Aidan John et al (69471), Reddie & Grose 16 Theobalds Road,  
London WC1X 8PL, (GB)

PATENT (CC, No, Kind, Date): EP 300516 A2 890125 (Basic)  
EP 300516 A3 890426  
EP 300516 B1 931124

APPLICATION (CC, No, Date): EP 88200921 820521;

PRIORITY (CC, No, Date): US 266413 810522; US 266539 810522; US 266521  
810522; US 266415 810522; US 266409 810522; US 266424 810522; US 266421  
810522; US 266404 810522; US 266414 810522; US 266532 810522; US 266403  
810522; US 266408 810522; US 266401 810522; US 266524 810522

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 67556 (EP 823025960)

INTERNATIONAL PATENT CLASS: G06F-009/46; G06F-012/14;

ABSTRACT EP 300516 A2

The system has memory storing data and instructions and processing means. Memory is organized into objects identified by unique identifiers (UIDs) comprising a logical allocation unit identifier (LAUID) and an object serial number (OSN) provided by an architectural clock, associated with an offset (O) and length (L) enabling logical addresses to be

derived. Instructions (SIN's) are in an intermediate level language - (SOP's = S - language operations). Associated names (NAME A, NAME B) point to name tables which identify subjects to which the processor may respond in relation to the instruction in question. Protection is afforded by restricting access to memory operations to a subject pertaining to the set of subjects pertaining to the object in question.

ABSTRACT WORD COUNT: 122

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1018
CLAIMS B	(German)	EPBBF1	868
CLAIMS B	(French)	EPBBF1	1115
SPEC B	(English)	EPBBF1	154256
Total word count - document A			0
Total word count - document B			157257
Total word count - documents A + B			157257

**21/3,AB,K/3 (Item 3 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00221731

**Credit transaction arrangements.**

**Anordnung mit Wertkarten.**

**Dispositif pour transaction a credit.**

PATENT ASSIGNEE:

GPT LIMITED, (986784), New Century Park P.O. Box 53, Coventry, CV3 1HJ,  
(GB), (applicant designated states: BE;DE;FR;IT;LU;NL;SE)

INVENTOR:

Hodgson, Thomas Francis, 2 Alder Avenue, Billinge Near Wigan, (GB)

Payne, Michael Wakefield, 201 Andover Road, Newbury Berkshire, (GB)

Piegrome, Peter Charles, 11 Aran Close, Hale Liverpool L24 5GB, (GB)

LEGAL REPRESENTATIVE:

Branfield, Henry Anthony et al (45871), The General Electric Company,  
p.l.c. GEC Patent Department Waterhouse Lane, Chelmsford, Essex CM1 2QX  
, (GB)

PATENT (CC, No, Kind, Date): EP 216521 A2 870401 (Basic)  
EP 216521 A3 881228  
EP 216521 B1 931103

APPLICATION (CC, No, Date): EP 86306548 860822;

PRIORITY (CC, No, Date): GB 8522427 850910

DESIGNATED STATES: BE; DE; FR; IT; LU; NL; SE

INTERNATIONAL PATENT CLASS: H04M-017/02;

ABSTRACT EP 216521 A2

The invention concerns call-charge payment of telephone calls from payphone telephone instruments (PI) using a credit card, or the like. The invention provides credit transaction arrangements for automatic call-charge payment of calls established through a telecommunications network from payphone instruments (PI). The payphone (PI) is provided with a credit card reader (CRM) which when activated causes the payphone (PI) to automatically set-up a path (NAP) through the telecommunications network to credit transaction equipment (CCE) at a remote location (NP) within the network. Initially, a first record data (HEAD), being relevant to call-charge payment, is transmitted over the path (NAP), validated and stored (CDS) at the credit transaction equipment (CCE), and the path is promptly disconnected. The subscriber then sets-up a communication path

through the network to a desired called subscriber for communication purposes. Following the release of the communication path, second record data (TAIL), also being relevant to the call-charge payment, is compiled in the payphone and subsequently transmitted to the credit transaction equipment (CCE) and combined with the first record data (HEAD) for call-charging payment purposes. A data base (DB) employed a computer is concerned with the bill processing.

ABSTRACT WORD COUNT: 194

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	2272
CLAIMS B	(German)	EPBBF1	2195
CLAIMS B	(French)	EPBBF1	2870
SPEC B	(English)	EPBBF1	3903
Total word count - document A			0
Total word count - document B			11240
Total word count - documents A + B			11240

...SPECIFICATION is identification), CALL COSTS (CC) and DIALLED DIGITS (DD). The HEAD DATA (HD) includes data **representing** the **SERIAL NUMBER** (SN) of the call from the payphone and the CREDIT CARD DATA (CCD), which is...

...CRM, and is then forwarded to card data checking means CCM which performs a local **security** check on the data. Upon the check being completed, and the CCM indicating a probable...

...send "Charging and Authorisation Data" (CAD) forward. The tone is present for up to 5 seconds . Failure to receive the in band tone within T1 seconds (see LIST 1 - various timeouts...minimum coin fee

Dial tone returned from network

2. CALLER SWIPES CARD

Payphone performs local **security** check on credit card

Payphone autodialls credit card system - access code

LCD changes to minimum...

...DATA 'CAD' TO CREDIT CARD SYSTEM

Data transmitted in DTMF

CAD comprises:

Card No.

Payphone **identity**

Call **serial number**

Comfort tone returned to call

5. CREDIT CARD SYSTEM VALIDATES CARD DETAILS

Partial record created...

**21/3,AB,K/8 (Item 5 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00861894

**MESSAGE QUEUE SERVER SYSTEM**

**SYSTÈME DE SERVEUR DE FILE D'ATTENTE DE MESSAGES**

Patent Applicant/Assignee:

INRANGE TECHNOLOGIES CORPORATION, 100 Mount Holly By-Pass, Lumberton, NJ  
08048, US, US (Residence), US (Nationality)

Inventor(s):

YARBROUGH Graham G, 111 High Rock Road, Sandy Hook, CT 06482, US,

Legal Representative:

SHEEHAN Kenneth J (agent), Pepper Hamilton LLP, 600 Fourteenth Street,

Serial 09//693563

January 29, 2004

NW, Hamilton Square, Washington, DC 20005-2004 (et al), US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200195585 A2-A3 20011213 (WO 0195585)  
Application: WO 2001US17858 20010601 (PCT/WO US0117858)  
Priority Application: US 2000209173 20000602  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD  
SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 9181

**English Abstract**

A message queue server emulates a computer peripheral that not only supports communication between two mainframes, but also provides a gateway to open systems computers, networks, and other similar message queue servers. The message queue server provides protocol-to-protocol conversion from mainframes to today's computing systems in a manner that does not require businesses that own the mainframes to rewrite legacy applications to share data with other mainframes and open systems. The message queue server emulates a mainframe peripheral coupled to a first mainframe having a first protocol. The system includes digital storage to temporarily store information from the first mainframe. The system includes at least one manager that (i) coordinates the transfer of the information of the first protocol between the mainframe peripheral emulator and the digital storage and (ii) coordinates transfer of the information between the digital storage and (a) a second mainframe having a second protocol or (b) a computer network having a third protocol. Preferably, the message queue server emulates a tape drive and arranges the stored messages in a queue. Optionally, the message queue server manages the message queues as a function of information usually found in a standard tape label.

Fulltext Availability: Claims

**Claim**

... the information normally contained in a standard tape label includes at least one of the **following** elements: volume **serial number**, data **set name**, expiration date, **security** attributes, and data characteristics.

43 The method as claimed in Claim 42, further including creating...

50 The apparatus as claimed in Claim 49, wherein the controller...

**21/3,AB,K/10 (Item 7 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00798308

**OBJECT AND FEATURE AUTHORIZATION FOR DIGITAL COMMUNICATION TERMINALS**  
**AUTORISATION D'OBJET ET DE CARACTERISTIQUE POUR TERMINAUX DE COMMUNICATION**  
**NUMERIQUES**

**Patent Applicant/Assignee:**

GENERAL INSTRUMENT CORPORATION, 101 Tournament Drive, Horsham, PA 19044,  
US, US (Residence), US (Nationality)

**Inventor(s):**

BOOTH Robert Charles, 1700 Rockcress Drive, Jamison, PA 18929, US,

Serial 09//693563

January 29, 2004

TAVOLETTI Donald, 2268 Ridge View Drive, Warrington, PA 18976, US,  
DIFIGLIA Michael, 1127 Westbury Road, Jenkintown, PA 19046, US,

Legal Representative:

LIPSITZ Barry R (agent), Law Offices of Barry R. Lipsitz, Building No. 8,  
755 Main Street, Monroe, CT 06468, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200131912 A1 20010503 (WO 0131912)

Application: WO 2000US41085 20001005 (PCT/WO US0041085)

Priority Application: US 99161228 19991022; WO 99US24745 19991022

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9125

English Abstract

A system for security and authorization processing in digital terminals. The processing load of a security processor (250) at the terminal (150) is reduced by configuring a multiple applications manager (MAM) (240) to determine if frequently-transmitted application data should be downloaded. The security processor is used by the MAM to build a local virtual application table (260) that indicates which applications are authorized for downloading. The security processor configures the terminal with an authorization state so that it knows which applications it is authorized to download, i.e., the applications (316', 334', 376') whose required authorization state correlate with the terminal's configured authorization state. The security processor is accessed when the terminals authorization state changes, or when a required authorization state of an application changes. These events are typically relatively infrequent.

Fulltext Availability: Detailed Description

Detailed Description

... containing new VATs with a different VAT identifier (ID), or the same VAT with a **different Sequence Number**. When terminals receive this new or modified VAT, the MAM module updates its internal tables...

...The MAM obtains the new authorization states for each of the virtual applications from the **Security Processor** by using the latest authorization requirements and the latest authorization rights (obtained via EMMs). Similarly, the MAM obtains new authorization state information from the **Security Processor** for all the virtual applications in the current VAT if the terminal receives new...

...for-MAM state match decoder condition. The state match decoder condition does not require a **Security** chip processing. The MPEG Packet Processor simply checks the state of the terminal to determine...as the home-VAT ID from the Virtual Application Config message described in Section 1 2 . **sequence - number** This field serves as a version number for the VAT.

If the sequence-number for...

21/3,AB,K/11 (Item 8 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00464405

METHOD FOR AUTHORIZING COUPLINGS BETWEEN DEVICES IN A CAPABILITY  
ADDRESSABLE NETWORK  
PROCEDE PERMETTANT D'AUTORISER DES COUPLAGES ENTRE UNITES DANS UN RESEAU  
ADRESSABLE PAR CAPACITE

Patent Applicant/Assignee:

MOTOROLA INC,

Inventor(s):

HARRIS Jeffrey Martin,  
WOODWARD Ernie,  
BORGSTAHL Ronald,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9854870 A2 19981203

Application: WO 98US11269 19980602 (PCT/WO US9811269)

Priority Application: US 97867311 19970602

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ  
VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH  
CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML  
MR NE SN TD TG

Fulltext Word Count: 24500

English Abstract

A method for bonding to a device (901, 902). The method includes a step of transmitting a beacon message (843). The method also includes steps of: (i) selecting a beacon opcode; (ii) selecting an identifier; (iii) selecting an identifier type; (iv) selecting an identifier address, composing the beacon opcode, the identifier, the identifier type and the identifier address into the beacon message (843). The method also includes the steps of receiving, a make bond message (844), transmitting a make bond status message (845), receiving an ask capability message (846), transmitting a tell capability message (847) and receiving an execute capability message (848). A method for disconnecting is also included.

Fulltext Availability: Detailed Description

Detailed Description

... Additionally, device A may be programmed to be recognized by one or more of the following: a **security group** unit **serial number**, a unique **security group** identifier that identifies the owner, a physical address and/or a telephone number for...

21/3,AB,K/12 (Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00432616

**A COMMUNICATION SYSTEM ARCHITECTURE**

**SYSTEME, PROCEDE ET PRODUIT MANUFACTURE POUR L'ARCHITECTURE D'UN SYSTEME DE  
COMMUNICATION**

Patent Applicant/Assignee:

MCI COMMUNICATIONS CORPORATION,  
ELLIOTT Isaac K,  
STEELE Rick D,  
GALVIN Thomas J,  
LAFRENIERE Lawrence L,  
KRISHNASWAMY Sridhar,  
FORGY Glen A,

REYNOLDS Tim E,  
SOLBRIG Erin M,  
CERF Vinton,  
GROSS Phil,  
DUGAN Andrew J,  
SIMS William A,  
HOLMES Allen,  
SMITH Robert S II,  
KELLY Patrick J III,  
GOTTLIEB Louis G,  
COLLIER Matthew T,  
WILLE Andrew N,  
RINDE Joseph,  
LITZENBERGER Paul D,  
TURNER Don A,  
WALTERS John J,  
EASTEP Guido M,  
MARSHALL David D,  
PRICE Ricky A,  
SALEH Bilal A,

Inventor(s):

ELLIOTT Isaac K,  
STEELE Rick D,  
GALVIN Thomas J,  
LAFRENIERE Lawrence L,  
KRISHNASWAMY Sridhar,  
FORGY Glen A,  
REYNOLDS Tim E,  
SOLBRIG Erin M,  
CERF Vinton,  
GROSS Phil,  
DUGAN Andrew J,  
SIMS William A,  
HOLMES Allen,  
SMITH Robert S II,  
KELLY Patrick J III,  
GOTTLIEB Louis G,  
COLLIER Matthew T,  
WILLE Andrew N,  
RINDE Joseph,  
LITZENBERGER Paul D,  
TURNER Don A,  
WALTERS John J,  
EASTEP Guido M,  
MARSHALL David D,  
PRICE Ricky A,  
SALEH Bilal A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9823080 A2 19980528

Application: WO 97US21174 19971114 (PCT/WO US9721174)

Priority Application: US 96751203 19961118; US 96751668 19961118; US 96752271 19961118; US 96758734 19961118; US 96751209 19961118; US 96751661 19961118; US 96752236 19961118; US 96752487 19961118; US 96752269 19961118; US 96751923 19961118; US 96751658 19961118; US 96752552 19961118; US 96751933 19961118; US 96751663 19961118; US 96746899 19961118; US 96751915 19961118; US 96752400 19961118; US

96751922 19961118; US 96751961 19961118  
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU  
ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES  
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 168195

English Abstract

Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site.

21/3,AB,K/13 (Item 10 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00419907

**MODULAR TRANSACTION TERMINAL**

**TERMINAL TRANSACTIONNEL MODULAIRE**

Patent Applicant/Assignee:

DATACARD CORPORATION,

Inventor(s):

LEVIE Stephen Alan,  
BROWN Bradley Dale,  
LOXTERCAMP Gregory John,  
HERMANSEN Michael E,  
O'Hare Emmett E,  
GHANBARZADEH Ahmad,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9810368 A1 19980312

Application: WO 97US15514 19970904 (PCT/WO US9715514)

Priority Application: US 96706506 19960906

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DE  
DK EE ES FI FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT  
UA UG UZ VN YU GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE  
CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML  
MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 32322

English Abstract

A portable, hand-held terminal comprises a core unit (30) including a keyboard (42), display (60), a microprocessor and memory, and a plurality of communication modules which can be selectively attached to the bottom of the core unit. The communication device may communicate with a cash register, check reader, computer, printer, modem, cash drawer, or biometric device. A terminal may be fitted with a magnetic strip reader (68), a smart card reader (80), a printer, a network interface card, and/or a modem.

Fulltext Availability: Detailed Description

Detailed Description

```
... key submitted earlier.  
1 5 sec-PIN-encrypt Encrypts the PIN data using an account number .  
sec- serial -num-submit Sets the serial number .  
OS Miscellaneous Calls  
format Format a string according to a format mask.  
fprintf Formatted output...functions. The struct security info is defined  
as follows. This is the structure for holding security information.  
struct security  
info I  
Uchar key  
info[32];  
Uchar awk info;  
Uchar amk7info;  
Uchar dukpt -key;  
char...  
...sec  
key-clear (Uchar key  
id)  
I 0 The sec  
key clear function erases the security key with the given ID. Any keys  
having the key id as a KEK is...  
...KEY and APP-WORKING-KEY) cannot be cleared. The process will be blocked if  
the security functions are being used by another process.  
sec-key clear returns a status.  
Return Meaning...  
...ID was given.  
int sec  
key  
set-Mgmt-mode (enum mgmnt-modes mode)  
Sets the security key management mode to be used by the PIN pad. This  
function is not used...KEY or APP-WORKING-KEY may be specified. The process  
will be blocked if the security functions are being used by another process.  
The kek id parameter defines the key ID...  
...encryption key has not been loaded.  
int sec-serial-num  
submit(char *ser-num  
ptr)  
Sets the serial number stored in security Acb. This function is  
included for compatibility with 290E applications. The ser-num ptr  
parameter...
```

21/3,AB,K/14 (Item 11 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00414550

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR SECURE, STORED VALUE  
TRANSACTIONS OVER AN OPEN COMMUNICATION NETWORK UTILIZING AN  
EXTENSIBLE, FLEXIBLE ARCHITECTURE  
SYSTEME, PROCEDE ET ARTICLE DE FABRICATION POUR TRANSACTIONS SEURISEES A  
VALEUR PREENREGISTREE DANS UN RESEAU OUVERT DE COMMUNICATIONS UTILISANT  
UNE ARCHITECTURE SOUPLE ET EXTENSIBLE

Patent Applicant/Assignee:

VERIFONE INC,  
ROWNEY Kevin T B,

Inventor(s):

ROWNEY Kevin T B,

Serial 09//693563

January 29, 2004

**Patent and Priority Information (Country, Number, Date):**

Patent: WO 9805011 A2 19980205

Application: WO 97US13673 19970731 (PCT/WO US9713673)

Priority Application: US 96692907 19960731

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN

MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU

ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES

FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 50185

**English Abstract**

An architecture that provides a server that communicates bidirectionally with a gateway over a first communication link, over which service requests flow to the server for one or more merchants and/or consumers is disclosed. Service requests are associated with a particular merchant based on storefront visited by a consumer or credentials presented by a merchant. Service requests result in merchant specific transactions that are transmitted to the gateway for further processing on existing host applications. By presenting the appropriate credentials, the merchant could utilize any other computer attached to the Internet utilizing a SSL or SET protocol to query the vPOS system remotely and obtain capture information, payment administration information, inventory control information, audit information and process customer satisfaction information. Secure transmission of a value transfer protocol transaction is provided between a plurality of computer systems over a public communication system, such as the Internet. A connection is created between two computer systems using a public network, such as the Internet, to connect the computers. Then, digital certificates and a digital signature are exchanged to ensure that both parties are who they say they are. Finally, the two smart cards involved in a transaction are read by individual computers connected utilizing the network, and the value transfer protocol is executed over the secured network. The value transfer protocol facilitates the exchange of money between the two smart cards.

Fulltext Availability: Detailed Description

**Detailed Description**

... TID's is used. The TID's stored in the pool need not be a **sequential set of numbers**; in fact they can be alpha/special/numeric combinations, and the TID's need have...network 2330, which is a LAN -143 outside the corporate firewall. The Gateway, on the **secure** public network 2330, utilizes TCP/IP 2320 to communicate with the near-end NIP. GATEWAYFEATURES...

...sustain reliable operations and enable graceful evolution, it is designed with some important attributes, including: **Security**, Availability, Performance, Scalability, and Manageability.

**Security****Channel Securit**

At the application level, SET provides signed and encrypted data encapsulations of payment information portions...

...the transaction messages. Transport-level encryption of the entire message packet is required for additional **security**. The HTTPS protocol - i.e. @ HTTP over SSL 3.0 - is utilized between the merchants issued for the Gateway and one certificate for each of the merchant servers.

**Secure Channel Certificates**

SSL will require separate certificates for the Gateway and the merchants.

- 144

Availability...

...encryption and decryption algorithms used in processing SET/SSL messages require significant computational power. A ' **security processor**' is deployed with the Gateway to boost the performance of cryptographic algorithms. The processor...SNMP-based performance monitoring. Efficient process management features minimize system load and increase server reliability. **Security** features are provided using the SSL 3.0 protocol.

Protocol Stacks

Internet and LAN - The...Control hard-coded at Gateway to W

(d) Originating Merchant from Merchant Certificate in unwrapped **SET** request **Number**

(e) **Sequence Number** generated at Gateway

Original Sequence generated at Gateway Number

(g) Date and Time of Original...

23/6/7 (Item 7 from file: 348)

00523254

Information search terminal and system

23/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01548629

Synchronization of plural databases in a database replication system

Synchronisierung von mehreren Datenbanken in einem System fur  
Vervielfaltung von Datenbanken

Synchronisation d'une pluralite de bases de donnees dans un systeme de  
replication de base de donnees

PATENT ASSIGNEE:

ITI, Inc., (3196750), 16 Industrial Boulevard, Paoli, PA 19301-1609, (US)  
, (Applicant designated States: all)

INVENTOR:

Holenstein, Paul J., 9 Paul Nelms Drive, Downingtown, Pennsylvania 19335,  
(US)

Holenstein, Bruce D., 2351 North Ridley Creek Road, Media, Pennsylvania  
19063, (US)

Strickler, Gary E., 1511 Franklin Drive, Pottstown, Pennsylvania 19465,  
(US)

LEGAL REPRESENTATIVE:

Brommer, Hans Joachim, Dr.-Ing. et al (2451), Lemcke, Brommer & Partner  
Patentanwalte Postfach 11 08 47, 76058 Karlsruhe, (DE)

PATENT (CC, No, Kind, Date): EP 1288796 A2 030305 (Basic)

APPLICATION (CC, No, Date): EP 2002017282 020801;

PRIORITY (CC, No, Date): US 930641 010815

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
IE; IT; LI; LU; MC; NL; PT; SE; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 1288796 A2

In a database synchronization process, a block of data is read from a source database at the first node. A marker is assigned to the block of data, and the marker is then written to an audit trail at the first node. The marker is sent from the audit trail to a second node having a target database. The block of data is sent from the first node to the second node without passing the block of data through the audit trail. At the

Serial 09//693563

January 29, 2004

second node, the block of data is stored in the target database upon receipt at the second node of the block of data and the marker assigned to the block of data. This process is repeated for additional blocks of data in the source database, wherein a marker is assigned to each subsequent block of data. In this manner, some or all of the source database may be replicated to the target database without having to store or pass any data in the source database in or through the audit trail at the first node.

ABSTRACT WORD COUNT: 180

NOTE: Figure number on first page: 2

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English) 200310 2415

SPEC A (English) 200310 14793

Total word count - document A 17208

Total word count - document B 0

Total word count - documents A + B 17208

...SPECIFICATION as only sending identifying information such as the primary keys, with or without a CRC/ **update timestamp/ update sequence number**, etc.

( 2 ) Asynchronously, send an audit marker via the AUDIT to the CONS and release all locks...

**23/3, AB, K/2 (Item 2 from file: 348)**

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01430990

**Method for returning merchandise****Guterücksendeverfahren****Procede de retour de marchandises****PATENT ASSIGNEE:**

Pitney Bowes Inc., (244959), World Headquarters, One Elmcroft Road,  
Stamford, Connecticut 06826-0700, (US), (Applicant designated States:  
all)

**INVENTOR:**

Sansone, Ronald P., 4 Trails End Road, Weston, Connecticut 06883, (US)  
Siveyer, Ian A., 46 Quarter Horse Road, Monroe, Connecticut 06468, (US)  
Sethi, Ahjaz A., 1 Farm Hill Road, West Haven, Connecticut 06516, (US)  
Law, Robert A., 36 Powderhorn Road, Ridgefield, Connecticut 06877, (US)  
Garvey, Susan, 503 Cascade Drive, Fairfield, Connecticut 06432, (US)  
Moughty, Brian J., 25 Anthony Lane, Darien, Connecticut 06820, (US)

**LEGAL REPRESENTATIVE:**

HOFFMANN - EITLE (101511), Patent- und Rechtsanwalte Arabellastrasse 4,  
81925 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1209598 A2 020529 (Basic)

APPLICATION (CC, No, Date): EP 2001127447 011127;

PRIORITY (CC, No, Date): US 722812 001127

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/60 ; G09F-003/02

ABSTRACT EP 1209598 A2

A Merchandise Return Label may be printed on a buyer's computer printer and paid for by the seller's postage meter. Goods mailed with the Merchandise Return Label will be considered metered mail. Returned goods may be delivered directly to the buyer, and postal employees will not

have to manually complete the Merchandise Return Label. Since the mailing of the returned goods was paid for by a postage meter, the Post Office would not have to receive payment from the seller when the seller receives the package.

ABSTRACT WORD COUNT: 87

NOTE: Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200222	512
SPEC A	(English)	200222	3921
Total word count - document A			4433
Total word count - document B			0
Total word count - documents A + B			4433

...SPECIFICATION return of the goods, return process 301 will inform buyer 200 to enter postal meter **serial number** 58 (Fig. 2) and **security code** 59 into computer 201 so that the above information will be received by return...

**23/3,AB,K/3 (Item 3 from file: 348)**

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.  
01147875

**Electronic payment system with inexpensive illegal acts detection scheme**  
**Elektronisches Zahlungssystem mit billigem Schema zum Ermitteln von**  
**illegalen Handlungen**

**Système electronique de paiement avec schema de detection d'actions**  
**illeégales peu couteux**

PATENT ASSIGNEE:

KABUSHIKI KAISHA TOSHIBA, (213137), 72, Horikawa-cho, Saiwai-ku,  
Kawasaki-shi, Kanagawa 212-8572, (JP), (Applicant designated States:  
all)

INVENTOR:

Yoshida, Hideki, 212-2-10, Ichibakami-cho, Tsurumi-ku, Yokohama-shi,  
Kanagawa-ken, (JP)

Imai, Toru, 1-12-1-E303, Tenjin-cho, Fuchu-shi, Tokyo-to, (JP)

LEGAL REPRESENTATIVE:

HOFFMANN - EITLE (101511), Patent- und Rechtsanwalte Arabellastrasse 4,  
81925 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1001392 A2 000517 (Basic)  
EP 1001392 A3 030108

APPLICATION (CC, No, Date): EP 2000102257 960313;

PRIORITY (CC, No, Date): JP 9552142 950313

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; SI

RELATED PARENT NUMBER(S) - PN (AN):

EP 732662 (EP 96103963)

INTERNATIONAL PATENT CLASS: G07F-019/00; G06F-017/60

ABSTRACT EP 1001392 A2

The present invention relates to a computer-based electronic payment system comprising a payer's check issuing computer (100, 100A) for issuing an electronic check, a payee's check processing computer (200, 200A) for receiving and processing the electronic check from the payee's check issuing computer (100, 100A) and transmitting each accepted electronic check; and a transaction executing computer (300, 300A) for receiving and processing the electronic check transmitted from the

payee's check transmitted from the payee's check processing computer (200, 200A). The electronic check issued by the payee's check issuing computer (100, 100A) also has an issue time data indicating a time of issue of the electronic check. The payee's processing computer (200, 200A) records a check identifier of each electronic check being accepted by the payee's check processing computer (200, 200A) during a first prescribed period of time and refuses an acceptance of the received electronic check in case a time of issue is older than the first prescribed period of time or the check identifier is identical to any recorded check identifier of an already accepted electronic check. To the contrary, it accepts the received electronic check when the acceptance is not refused.

ABSTRACT WORD COUNT: 194

NOTE: Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200020	1761
SPEC A	(English)	200020	6791
Total word count - document A			8552
Total word count - document B			0
Total word count - documents A + B			8552

...SPECIFICATION s check issuing system 100 is stored in a consumer identifier memory unit 1 in **advance**. A check **serial number** memory unit 2 stores a previously issued check serial number, and outputs a new check serial number by...

**23/3,AB,K/4 (Item 4 from file: 348)**

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01056450

**A method for authentication item**

**Ein Verfahren fur die Beglaubigung von Elementen**

**Un procede pour l'authentification d'elements**

**PATENT ASSIGNEE:**

YEDA RESEARCH & DEVELOPMENT COMPANY, LTD., (268946), Weizman Institute of Science P.O. Box 95, 76100 Rehovot, (IL), (Applicant designated States: all)

**INVENTOR:**

Naor, Moni, 5 Beit-Zori Street, Tel Aviv 69122, (IL)

Nissim, Yaakov, 28 Haruzim Street, Ramat-Gan 52525, (IL)

**LEGAL REPRESENTATIVE:**

Joly, Jean-Jacques et al (39741), Cabinet Beau de Lomenie 158, rue de l'Universite, 75340 Paris Cedex 07, (FR)

**PATENT (CC, No, Kind, Date): EP 932109 A2 990728 (Basic)**  
EP 932109 A3 030618

**APPLICATION (CC, No, Date): EP 99400130 990121;**

**PRIORITY (CC, No, Date): US 10571 980122**

**DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE**

**EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI**

**INTERNATIONAL PATENT CLASS: G06F-017/30 ; H04L-009/32**

**ABSTRACT EP 932109 A2**

A memory containing an authenticated search tree that serves for authenticating membership or non membership of items in a set. The authenticated search tree including a search tree having nodes and leaves

and being associated with a search scheme. The nodes including dynamic search values and the leaves including items of the set. The nodes are associated, each, with a cryptographic hash function value that is produced by applying a cryptographic hash function to the cryptographic hash values of the children nodes and to the dynamic search value of the node. The root node of the authenticated search tree is authenticated by a digital signature.

ABSTRACT WORD COUNT: 106

NOTE: Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9930	531
SPÉC A	(English)	9930	6284
Total word count - document A			6815
Total word count - document B			0
Total word count - documents A + B			6815

...SPECIFICATION a conventional 2-3 delete item step is executed, namely:

1. Delete each expired certificate **serial number** from the 2 -3 tree, **updating** the values of the nodes on the deletion path.

Likewise, in order to insert an...

**23/3, AB,K/5 (Item 5 from file: 348)**

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00811015

**Multimedia playing apparatus utilizing synchronization of scenario-defined processing time points with playing of finite-time monomedia item**  
**Multimedia-Wiedergabeeinrichtung mit Synchronisation von in Skripten definierten Ausfuhrungszeitpunkten mit der Wiedergabe eines in der Zeit begrenzten Monomedia-Objekts**

**Appareil de reproduction multimedia utilisant une synchronisation d'instants d'exécution définis dans un scenario avec la reproduction d'un item monomedia limite dans le temps**

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216887), 1006, Oaza Kadoma,  
Kadoma-shi, Osaka-fu, (JP), (Proprietor designated states: all)

INVENTOR:

Asai, Kayoko, 5-49-15-206, Takasago, Katsushika-ku, Tokyo, (JP)  
Sato, Makoto, 1-3-6, Hachiman-cho, Fuchu-shi, Tokyo, (JP)  
Minemura, Atsushi, 1-22-4, Higashi Kashiwa, Kashiwa-shi, Chiba-ken, (JP)  
Oka, Toshio, 2432-3, Nase-cho, Totsuka-ku, Yokohama, (JP)

LEGAL REPRESENTATIVE:

Finsterwald, Martin, Dr. et al (75231), Manitz, Finsterwald & Partner GbR  
Martin-Greif-Strasse 1, 80336 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 753820 A1 970115 (Basic)  
EP 753820 B1 020925

APPLICATION (CC, No, Date): EP 96111195 960711;

PRIORITY (CC, No, Date): JP 95174662 950711; JP 95306372 951101

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 753820 A1

A multimedia playing apparatus plays hypermedia titles each consisting of a plurality of monomedia objects including at least one finite time monomedia object such as a video object, which is formatted as a sequence of fixed-length playing sections such as video frames and functions as a

base-axis object for providing a timing reference. The apparatus executes playing of a hypermedia title in accordance with processing time points specified as respective numbers of the playing sections, and stores and utilizes a plurality of sets of synchronization trigger data each of which designates that playing of a specific monomedia object other than the base-axis object is to be started, or is to be ended, at a specific processing time point, with the synchronization trigger data sets being successively accessed and used as the corresponding processing time points are respectively reached during playing of the hypermedia title.

ABSTRACT WORD COUNT: 145

NOTE: Figure number on first page: 5

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	2462
CLAIMS B	(English)	200239	2561
CLAIMS B	(German)	200239	2211
CLAIMS B	(French)	200239	3201
SPEC A	(English)	EPAB97	19925
SPEC B	(English)	200239	20567
Total word count - document A		22391	
Total word count - document B		28540	
Total word count - documents A + B		50931	

...SPECIFICATION means, obtaining the sets of synchronization trigger data from the scenario data and

- storing said **sets sequentially numbered** locations in said internal memory means,

- for setting the processing event counter means and playing...which are of identical length. Such a video object will be referred to in the **following** as the base-axis object of the hypermedia title. For example if the base-axis...

...playing progression counter.

It should be noted that the term "played" as used in the **following** description and in the claims is to be understood in a very broad sense, i...

...to the other monomedia objects of the hypermedia title (these being referred to in the **following** as the non base-axis objects) with the playing progression of the base-axis object...means, obtaining the sets of synchronization trigger data from the scenario data and storing the **sets in sequentially numbered** locations in the internal memory means,

Set the processing event counter means and playing progression...

23/3,AB,K/6 (Item 6 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00785432

Electronic payment system with inexpensive illegal acts detection scheme  
Elektronisches Zahlungssystem mit preisgunstiger Einrichtung zur Ermittlung von gesetzeswidrigen Taten

Systeme de paiement electronique avec arrangement peu couteux pour la detection d'actions illegales

PATENT ASSIGNEE:

KABUSHIKI KAISHA TOSHIBA, (213130), 72, Horikawa-cho, Saiwai-ku,  
Kawasaki-shi, Kanagawa-ken 210-8572, (JP), (Proprietor designated states: all)

INVENTOR:

Yoshida, Hideki, 212-2-10, Ichibakami-cho, Tsurumi-ku, Yokohama-shi,  
Kanagawa-ken, (JP)  
Imai, Toru, A201-32-4, Komaoka, Tsurumi-ku, Yokohama-shi, Kanagawa-ken,  
(JP)

LEGAL REPRESENTATIVE:

Zangs, Rainer E., Dipl.-Ing. et al (72561), Hoffmann Eitle, Patent- und  
Rechtsanwalte, Arabellastrasse 4, 81925 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 732662 A2 960918 (Basic)  
EP 732662 A3 970212  
EP 732662 B1 010627

APPLICATION (CC, No, Date): EP 96103963 960313;

PRIORITY (CC, No, Date): JP 9552142 950313

DESIGNATED STATES: DE; FR; GB

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1001392 (EP 2000102257)

INTERNATIONAL PATENT CLASS: G06F-017/60 ; G07F-007/10

ABSTRACT EP 732662 A2

A computer-based electronic payment system, in which a payer's check issuing computer issues an electronic check having a check identifier and an issue time, where the check identifier includes a payer identifier for uniquely identifying a payer and a payment identifier for uniquely identifying a payment. Then, at a payee's check processing computer receiving the electronic check from the payer and at a bank's check processing computer receiving the electronic check transmitted from the payee, a check identifier of each electronic check accepted during a prescribed period of time past of a current time is recorded, and a received electronic check is refused when the issue time of the received electronic check is older than the prescribed period of time past of the current time or the check identifier of the received electronic check is identical to any recorded check identifier of an already accepted electronic check, or a received electronic check is accepted when the acceptance is not refused. (see image in original document)

ABSTRACT WORD COUNT: 190

NOTE: Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	2730
CLAIMS B	(English)	200126	1537
CLAIMS B	(German)	200126	1438
CLAIMS B	(French)	200126	1645
SPEC A	(English)	EPAB96	6793
SPEC B	(English)	200126	5724

Total word count - document A 9525

Total word count - document B 10344

Total word count - documents A + B 19869

...SPECIFICATION s check issuing system 100 is stored in a consumer identifier memory unit 1 in **advance**. A check **serial number** memory unit 2 stores a previously issued check serial number, and outputs a new check serial number by...

23/3,AB,K/8 (Item 8 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

Serial 09//693563

January 29, 2004

00416432

Time interval triggering and hardware histogram generation  
Zeitintervall-Triggerung und Hardware Erzeugung von Histogramm  
Déclenchement d'intervalle de temps et génération par matériel  
d'histogramme

## PATENT ASSIGNEE:

Hewlett-Packard Company, (206031), Mail Stop 20 B-O, 3000 Hanover Street,  
 Palo Alto, California 94304, (US), (applicant designated states:  
 DE;FR;GB)

## INVENTOR:

Ho, Leland Murray, 487 S. Taaffe Street, Apt. 3, Sunnyvale, CA 94086,  
 (US)  
 Stephenson, Paul S., 5247 Forrest Hill Drive, Pleasanton, CA 94566, (US)  
 Schmitz, John S., 942 Chelin Drive, Sunnyvale, CA 94087, (US)

## LEGAL REPRESENTATIVE:

Liesegang, Roland, Dr.-Ing. et al (7741), FORRESTER & BOEHMERT  
 Franz-Joseph-Strasse 38, 80801 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 418499 A2 910327 (Basic)  
 EP 418499 A3 910522  
 EP 418499 B1 961218

APPLICATION (CC, No, Date): EP 90113953 900720;

PRIORITY (CC, No, Date): US 409183 890919

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/00 ; G01R-023/00

## ABSTRACT EP 418499 A2

A time interval data processing circuit uses a pipelined hardware data processor to perform the conversion of incoming time stamp data into time interval results. These results can be further processed into a hardware accumulated histogram or can be compared against limits to determine if a time interval trigger condition has occurred.

In the first stage of the pipeline, the processing circuit subtracts the two time stamps from the current and the previous event to determine the time interval between events being measured. The second stage checks the measurement result against minimum and maximum limits and determines which bin the measurement belongs in. The limit testing determines if the measurement fits the histogram limits and also yields the data required to perform measurement triggering on time intervals. The third stage of the pipeline increments the appropriate histogram bin in RAM. The first and third stages of the pipeline are themselves pipelined in substages.

To facilitate pipelining in storing the histogram results, the circuit uses dual port RAMs to achieve a fast data accumulation rate. When histogramming, the stored bin data must be incremented each time a new measurement occurs. The third pipeline stage read, increment, write operation is pipelined in substages by adding a latch in the data incrementing loop for the Dual Port RAM. The latch also provides a way of avoiding access conflicts when the same bin is incremented repeatedly.

## ABSTRACT WORD COUNT: 236

LANGUAGE (Publication,Procedural,Application): English; English; English

## FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	515
CLAIMS B	(English)	EPAB96	1161
CLAIMS B	(German)	EPAB96	1029
CLAIMS B	(French)	EPAB96	1447
SPEC A	(English)	EPABF1	4356
SPEC B	(English)	EPAB96	4450

Total word count - document A 4871  
Total word count - document B 8087

Total word count - documents A + B 12958

...SPECIFICATION 305. Latch 305 comprises a 2:1 multiplexer, with output controlled by the relatch signal, followed by a flip-flop. If two sequential bin numbers are equal, the read and write addresses are equal, the relatch output of comparator 311...

**23/3,AB,K/9 (Item 1 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
01070899

**HIGH-PERFORMANCE CHANGE CAPTURE FOR DATA WAREHOUSING**  
**CAPTURE DE CHANGEMENT HAUTE PERFORMANCE POUR ENTREPOSAGE DE DONNEES**

Patent Applicant/Assignee:

ORACLE INTERNATIONAL CORPORATION, 500 Oracle Parkway, M/S 5OP7, Redwood Shores, CA 94065, US, US (Residence), US (Nationality)

Inventor(s):

NORCOTT William D, 18 Powers Road, Hollis, NH 03049, US,

Legal Representative:

CARLSON Stephen C (agent), Ditthavong & Carlson, P.C., 10507 Braddock Rd, Suite A, Fairfax, VA 22032, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2003100666 A2 20031204 (WO 03100666)

Application: WO 2003US16402 20030523 (PCT/WO US0316402)

Priority Application: US 2002383387 20020524; US 2003435703 20030512

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6097

English Abstract

A method and software for change data capture is described, in which change data is extracted from a recovery log in a single pass and stored into multiple database objects, such as change tables. The change data indicates modifications that has been performed to multiple source objects that correspond to the multiple database objects. In a preferred embodiment, this can be accomplished with a single multi-table insert SQL statement.

Main International Patent Class: G06F-017/30

Fulltext Availability: Detailed Description

Detailed Description

... values (OP 237 column with 'UN') of the same operation will have the same row sequence number, because these two records are for the same change operation on the OLTP database 1 122 (an update operation). Although not depicted in FIG...

**23/3,AB,K/10 (Item 2 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

Serial 09//693563

January 29, 2004

(c) 2004 WIPO/Univentio. All rts. reserv.

01066487

**METHOD AND APPARATUS FOR CHANGE DATA CAPTURE IN A DATABASE SYSTEM**  
**PROCEDE ET APPAREIL DE CHANGEMENT DE SAISIE DE DONNEES DANS UN SYSTEME DE**  
**BASE DE DONNEES**

## Patent Applicant/Assignee:

ORACLE INTERNATIONAL CORPORATION, 500 Oracle Parkway, M/S 50P7, Redwood Shores, CA 94065, US, US (Residence), US (Nationality), (For all designated states except: US)

## Patent Applicant/Inventor:

NORCOTT William D, 18 Powers Road, Hollis, NH 03049, US, US (Residence), US (Nationality), (Designated only for: US)

BREY Michael, c/o Oracle International Corporation, 500 Oracle Parkway, Redwood Shores, CA 94065, US, US (Residence), -- (Nationality), (Designated only for: US)

GALANES John, c/o Oracle International Corporation, 500 Oracle Parkway, Redwoodshores, CA 94065, US, US (Residence), -- (Nationality), (Designated only for: US)

BINGHAM Paula, c/o Oracle International Corporation, 500 Oracle Parkway, Redwood Shores, CA 94065, US, US (Residence), -- (Nationality), (Designated only for: US)

GUZMAN Raymond, c/o Oracle International Corporation, 500 Oracle Parkway, Redwwod Shores, CA 94065, US, US (Residence), -- (Nationality), (Designated only for: US)

## Legal Representative:

CARLSON Stephen C (et al) (agent), Ditthavong & Carlson, P.C., 10507 Braddock Rd, Suite A, Fairfax, VA 22032, US,

## Patent and Priority Information (Country, Number, Date):

Patent: WO 200396227 A2 20031120 (WO 0396227)

Application: WO 2003US14431 20030509 (PCT/WO US0314431)

Priority Application: US 2002140818 20020509

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7498

## English Abstract

A method of change data captured is disclosed, in which modifications made to on-line transaction processing (OLTP) tables(e.g. inserts, updates, and deletes) are maintained in a database object, referred to as a change table. The change data in the change table is then made available to analysis applications in a controlled manner, such as in accordance with a publication-subscription model.

Main International Patent Class: G06F-017/30

Fulltext Availability: Detailed Description

## Detailed Description

... values (OP 237 column with 'UN') of the same operation will have the same row **sequence number**, because these **two** records are for the same **change** operation on the OLTP database 1 1 3 (an update operation).

Although not depicted in...

**23/3,AB,K/11 (Item 3 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

01051390

**DATABASE SYSTEM**

**SYSTEME DE BASES DE DONNEES**

Patent Applicant/Assignee:

ISOCRA LIMITED, Abberley House, Granhams Road, Great Shelford, Cambridge CB2 5LG, GB, GB (Residence), GB (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

HOVERD Timothy Stephen, 5 Haggis Gap, Fulbourn, Cambridge CB1 5HD, GB, GB (Residence), GB (Nationality), (Designated only for: US)

SHEEHAN Dean Alan, 72 Melvin Way, Histon, Cambridge CB4 9HZ, GB, GB (Residence), GB (Nationality), (Designated only for: US)

HOWLETT Denis Ronald, 30 Tenison Road, Cambridge CB1 5DW, GB, GB (Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

EVENS Paul Jonathan (et al) (agent), Maguire Boss, 5 Crown Street, St. Ives, Cambridgeshire PE27 5EB, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200381464 A2 20031002 (WO 0381464)

Application: WO 2003GB1233 20030321 (PCT/WO GB0301233)

Priority Application: GB 20026810 20020322

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 12311

**English Abstract**

The present invention relates to a database system. In particular, the invention relates to a system for accessing databases, and specifically, but not exclusively relational databases, over a computer network. The database access system comprises a database access object (20), which operates on a client computer that functions as an interface between a database client (10) and a database server (12). The database object receives database queries from the client and returns a response to the queries to the client. Each database access object maintains a cache of data and if the response data is available in the cache provides the response from the cached data. Otherwise, a query is passed to the database server to retrieve data to make a response. Upon a change in the data cached in the client, the client sends a message to other like database access objects to indicate to the other database access objects the extent to which the data in their caches is invalid.

Main International Patent Class: **G06F-017/30**

Fulltext Availability: Detailed Description

Detailed Description

... be cleared.

Update

Updates may be performed against tables or tables being used to source **sequence numbers**. These **two** are considered separately. To **update** a table, modify it to include version update and version restriction in where clause; delegate...

**23/3,AB,K/12 (Item 4 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00997933

**A TICKET AND A METHOD OF BILLING**  
**BILLET ET PROCEDE DE FACTURATION**

Patent Applicant/Assignee:

JE SYSTEMKONSULT AB, Svanvagen 16, S-183 77 Taby, SE, SE (Residence), SE  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

EHRENSVARD Jakob, Svanvagen 16, S-183 77 Taby, SE, SE (Residence), SE  
(Nationality), (Designated only for: US)

EHRENSVARD Stina, Svanvagen 16, S-183 77 Taby, SE, SE (Residence), SE  
(Nationality), (Designated only for: US)

Legal Representative:

HINZ Udo (et al) (agent), Zacco Sweden AB, Box 23101, S-104 35 Stockholm,  
SE,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200327933 A1 20030403 (WO 0327933)

Application: WO 2002SE1742 20020924 (PCT/WO SE0201742)

Priority Application: US 2001324070 20010924; US 2001324280 20010925; US  
2001325175 20010928

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8867

English Abstract

The invention relates to a method of attaching a billing ticket (22) to a transfer protocol such as HTTP for communication over an open network (10) for data and telecommunication between an end-user (14), a service provider (12) and a content provider (18), and a ticket (22) therefore.

Main International Patent Class: **G06F-017/60**

Fulltext Availability: Detailed Description

Detailed Description

... Internet 10 may have several IP numbers mapped to a single URL, resulting in a **different IP number** for **subsequent DNS queries**. A **following** HTTP GET/POST operation uses a retrieved IP number to address the CP 18, where...

**23/3,AB,K/15 (Item 7 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

Serial 09//693563

January 29, 2004

00965595

**CONSISTENT READ IN A DISTRIBUTED DATABASE ENVIRONMENT****LECTURE COHERENTE DANS UN ENVIRONNEMENT DE BASE DE DONNEES DISTRIBUEE**

Patent Applicant/Assignee:

ORACLE INTERNATIONAL CORPORATION, 500 Oracle Parkway, Redwood Shores, CA  
94065, US, US (Residence), US (Nationality)

Inventor(s):

GANESH Amit, 1426 Brookglen Drive, San Jose, CA 95129, US,  
BAMFORD Roger, 555 Manzanita Way, Woodside, CA 94062, US,

Legal Representative:

EICHSTAEDT Cheryl (agent), Hickman Palermo Truong & Becker, LLP, 1600  
Willow Street, San Jose, CA 95125, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200299701 A2-A3 20021212 (WO 0299701)

Application: WO 2002US16886 20020529 (PCT/WO US02016886)

Priority Application: US 2001295104 20010601; US 2002119672 20020409

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8560

English Abstract

Techniques are provided for determining which data item version to supply to a query. According to the techniques, the determination is made by associating a new field, which indicates the time a data item version was current, with each data item version; associating a new field with each query, which indicates the last change that the query must see made by the transaction to which the query belongs; and determining which data item version to use to answer the query based, in part, on a comparison between the values of the two new fields.

Main International Patent Class: G06F-017/30

Fulltext Availability: Detailed Description

Detailed Description

... LATEST-MISSINGTRANSACTION will be zeroed out and the OTHER-TRANSACTIONS-ROLLEDOUT-INDICATOR will not be set. The SEQUENCE - NUMBER -OF-MOST-RECENTMISSING- CHANGE will be zeroed out.

Assume that rollouts are performed on data item version 1 00...

23/3,AB,K/16 (Item 8 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00963611

**EXTENDED WEB ENABLED MULTI-FEATURED BUSINESS TO BUSINESS COMPUTER SYSTEM  
FOR RENTAL VEHICLE SERVICES****SYSTEME INFORMATIQUE INTERENTREPRISES A ELEMENTS MULTIPLES A ACCES INTERNET  
POUR SERVICES DE LOCATION DE VEHICULES**

Patent Applicant/Assignee:

THE CRAWFORD GROUP INC, 600 Corporate Park Drive, St. Louis, MO 63105, US  
, US (Residence), US (Nationality), (For all designated states except:  
US)

Serial 09//693563

January 29, 2004

## Patent Applicant/Inventor:

WEINSTOCK Timothy Robert, 1845 Highcrest Drive, St. Charles, MO 63303, US  
, US (Residence), US (Nationality), (Designated only for: US)  
DE VALLANCE Kimberly Ann, 2037 Silent Spring Drive, Maryland Heights, MO  
63043, US, US (Residence), US (Nationality), (Designated only for: US)  
HASELHORST Randall Allan, 1016 Scenic Oats Court, Imperial, MO 63052, US,  
US (Residence), US (Nationality), (Designated only for: US)  
KENNEDY Craig Stephen, 9129 Meadowglen Lane, St. Louis, MO 63126, US, US  
(Residence), US (Nationality), (Designated only for: US)  
SMITH David Gary, 10 Venice Place Court, Wildwood, MO 63040, US, US  
(Residence), US (Nationality), (Designated only for: US)  
TINGLE William T, 17368 Hilltop Ridge Drive, Eureka, MO 63025, US, US  
(Residence), US (Nationality), (Designated only for: US)  
KLOPFENSTEIN Anita K, 433 Schwarz Road, O'Fallon, IL 62269, US, US  
(Residence), US (Nationality), (Designated only for: US)

## Legal Representative:

HAFERKAMP Richard E (et al) (agent), Howell & Haferkamp, L.C., Suite  
1400, 7733 Forsyth Blvd., St. Louis, MO 63105-1817, US,

## Patent and Priority Information (Country, Number, Date):

Patent: WO 200297700 A2 20021205 (WO 0297700)

Application: WO 2001US51431 20011019 (PCT/WO US0151431)

Priority Application: US 2000694050 20001020

## Parent Application/Grant:

Related by Continuation to: US 2000694050 20001020 (CIP)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU  
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 237932

## French Abstract

La presente invention concerne un systeme informatique de transaction entre entreprises qui dans un mode de realisation prefere est destine a fournir des services de location de vehicules pour des utilisateurs a demande elevee comportant un portail de reseau Internet grace auquel l'utilisateur a demande elevee peut acceder a une pluralite de fournisseurs de services comportant un reseau informatique d'entreprise integre pour au moins un fournisseur de services de location de vehicules. Le reseau informatique de fournisseur de services de location de vehicules est configure pour l'interconnexion d'une pluralite de succursales de diversite geographique, presentant le catalogue de leurs vehicules de location disponibles et des programmes les concernant ainsi que pour la gestion de toutes les donnees de transaction concernant son entreprise. Le portail de reseau Internet permet une connectivite et une transferabilite universelles pour une association d'entreprises a plusieurs niveaux qui placent regulierement des demandes elevees d'achat de location avec son associe commercial et egalement les autres fournisseurs de services qui peuvent ou non avoir le meme systeme et logiciel informatique d'entreprise integre. L'utilisation du procede et de l'appareil de la presente invention permet de placer, de grands volumes de transactions de location, de les controler, de les modifier en

Serial 09//693563

January 29, 2004

cours d'operation, et de les conclure avec des operations de comptabilite financiere et paiement pratiquement sans intervention humaine.

Main International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

## Detailed Description

... two businesses which provide significant advantages over its prior embodiment. More particularly,, the inventors have succeeded in replacing the dedicated pipeline access of the existing system with a web portal allowing...A's then execute the ARMS Generate Transaction Credits (AM108OV1) program passing the Transmission Control Sequence ID Number , Group Control Sequence ID Number , Vendor Transaction ID and the Execution Code of 'RI (for Rental Notification) . - IF processing a...

**23/3,AB,K/17 (Item 9 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00961508

**SYNCHRONOUS CHANGE DATA CAPTURE IN A RELATIONAL DATABASE****CAPTURE DE DONNEES DE CHANGEMENT SYNCHRONE DANS UNE BASE DE DONNEES RELATIONNELLE**

## Patent Applicant/Assignee:

ORACLE INTERNATIONAL CORPORATION, 500 Oracle Parkway, MS 50P7, Redwood Shores, CA 94065, US, US (Residence), US (Nationality), (For all designated states except: US)

## Patent Applicant/Inventor:

NORCOTT William D, 18 Powers Road, Hollis, NH 03049, US, US (Residence), US (Nationality), (Designated only for: US)

## Legal Representative:

CARLSON Stephen C (et al) (agent), Ditthavong & Carlson, P.C., 10507 Braddock Rd, Suite A, Fairfax, VA 22032, US,

## Patent and Priority Information (Country, Number, Date):

Patent: WO 200295632 A2-A3 20021128 (WO 0295632)

Application: WO 2002US16470 20020524 (PCT/WO US0216470)

Priority Application: US 2001863422 20010524

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6995

## English Abstract

A synchronous change data capture system and methodology are described in which, for each statement of a transaction, a transaction identifier (233, 241) that uniquely identifies each transaction is recorded along with the change data (231). When the transaction is committed, the transaction identifier (233, 241) and a system change number (243) for the commit is recorded in a transaction table (250). To identify the commit system change number for each statement in the change data, the transaction identifier (233, 241) in the change data is used to fetch the commit system change number (243) from the transaction table (250).

Main International Patent Class: G06F-017/30

Fulltext Availability: Detailed Description

Detailed Description

... values (OP 237 column with 'UN') of the same operation will have the same row **sequence number**, because these two records are for the same **change** operation on the OLTP database 1 1 3 (an update operation). Although not depicted in...

23/3,AB,K/20 (Item 12 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00903278

**E-COMMERCE APPLICATION BUILT USING WORKFLOWS ON A WORKFLOW ENGINE AND METHODS THEREOF**

**APPLICATION DE COMMERCE ELECTRONIQUE CONSTRUISTE AU MOYEN D'UN FLUX DE TRAVAUX SUR UN MOTEUR DE FLUX DE TRAVAUX ET PROCEDES CORRESPONDANTS**

Patent Applicant/Assignee:

ASERA INC, 600 Clipper Drive, Suite 100, Belmont, CA 94002, US, US  
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

LIANG John Sae, 205 Houghton St., Mountain View, CA 94041, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

WHEELER Jeffrey (agent), McAndrews, Held, and Malloy, Ltd., 500 W.  
Madison, Suite 3400, Chicago, IL 60661, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200237368 A2-A3 20020510 (WO 0237368)

Application: WO 2001US26194 20010822 (PCT/WO US0126194)

Priority Application: US 2000702148 20001030

Parent Application/Grant:

Related by Continuation to: US 2000702148 20001030 (CON)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU  
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7237

English Abstract

An e-commerce or business application built using workflows for execution as a series of steps by a workflow (or interpreter) engine. The steps might be arranged as a coded series of steps (i.e., a flowchart or the like). A page (or series of pages) is provided, each of which has content and actions. An interactive flow layer is also provided for facilitating the transition from one screen (or workflow) to another. An associated view layer is used to implement the series of steps within the screen. The view might implement at least one interactive step, which takes data incoming into the step and renders the data into a viewable language, such as HTML. This layer is known as the presentation layer. An address, name of the action, and sequence number are associated with each such interactive step. The elements displayed by the browser can be clicked upon and the address returned so that the steps can be navigated through

without losing track of the sequence steps. At least one state variable, global or otherwise, is used to maintain persistence of certain data between the steps. As each of the steps is executed, the sequence number is incremented. If a user tries to move around in the sequence, the sequence number should match the one that is stored in server memory in order for a display to be valid. Actions can further be labeled as repeatable, non-repeatable, or conditional repeatable. Non-repeatable actions require the sequence numbers to match. Repeatable actions do not depend on the sequence numbers. Conditional repeatable actions are repeatable under certain conditions.

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/30 ...

Fulltext Availability: Detailed Description

Detailed Description

... 3 and 4 (initially) associated with the global states 464. If the global states are changed, then these two sequence numbers will be incremented to 5 and 6 respectively. The IS can be specified to depend...

23/3,AB,K/21 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00897532

**METHOD AND APPARATUS FOR DATA PROCESSING**

**PROCEDE ET APPAREIL DE TRAITEMENT DE DONNEES**

Patent Applicant/Assignee:

MAXIMUM AVAILABILITY LIMITED, 46 Mulgan Way, Browns Bay, Auckland, NZ, NZ  
(Residence), NZ (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

TARBELL James Scott, 36 Waitohu Road, York Bay, Eastbourne, Wellington,  
US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HAWKINS Michael Howard (et al) (agent), Baldwin Shelston Waters, P.O. Box  
852, Wellington, NZ,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200231696 A1 20020418 (WO 0231696)

Application: WO 2001NZ206 20011001 (PCT/WO NZ0100206)

Priority Application: NZ 507386 20001009

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CO CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EC EE EE (utility model) ES FI FI (utility model)  
GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MA MD MG MK MN MW MZ NO NZ PH PL PT RO RU SD SE SG SI SK SK (utility  
model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 4139

English Abstract

The invention relates to data processing methods and systems including: a method of database replication in which information strings are assigned to serialisation groups for processing. A method of memory management in which data is read from a storage space area whilst no data is written to it. A method of replicating a database in which a dynamic table is

created to provided processing information for database members. A method of replicating a database wherein tasks are allocated to program components without program components interacting.

Main International Patent Class: G06F-017/30

Fulltext Availability: Detailed Description

Detailed Description

... is present in the MBIX index. If so, operation proceeds to step 13 and a **serialisation group number** and database file index (DBFIDX) is returned and processing continues within the assigned serialisation group...

...obtained from MBIX table 10 than from MXSGMBAS database 9

This method gives the **following**, significant, performance benefits.

1. The serialisation groups do not need to search for a member...

...storage unit has a storage unit header 20. The storage unit header 20 gives the **number of serialisation groups** which have journal entries in the storage unit. Each data segment consists of a storage...

**23/3, AB, K/22 (Item 14 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.  
00822257

**AUTHENTICITY VERIFICATION METHOD AND APPARATUS**

**PROCEDE DE VERIFICATION D'AUTHENTICITE ET APPAREIL ASSOCIE**

Patent Applicant/Assignee:

CROSSOFF INC, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

SNOW Donnie, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (Designated only for: US)

HAYES Mike, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (Designated only for: US)

HUSSEY John, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (Designated only for: US)

KLAAMAS Mark, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (Designated only for: US)

BECHARD Kevin, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (Designated only for: US)

BISHOFF Mark, Suite 900, 1809 Barrington Street, Halifax, Nova Scotia B3J 3K8, CA, CA (Residence), CA (Nationality), (Designated only for: US)

Legal Representative:

SHARPE Paul S (agent), Marks & Clerk, P.O. Box 957, Station B, Ottawa, Ontario K1P 5S7, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200155882 A2-A3 20010802 (WO 0155882)

Application: WO 2001CA84 20010124 (PCT/WO CA0100084)

Priority Application: US 2000177672 20000127

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English  
Fulltext Word Count: 5175  
English Abstract

A method and apparatus for insuring authenticity for consumer goods as well as products transferred to another party. In one embodiment, a record of authenticity is provided with a good at the point of manufacture. The record of authenticity includes an item code and a registration number unique to the good. An internet database stores the authenticity data. Once an article or good is purchased, the owner of the article accesses the database and is forwarded a second registration number which is different from the initial registration number provided at the point of manufacture. The owner may register as a legitimate owner of authentic goods by entering the new registration number and item code as well as other information. This information is stored in the internet database for the good in issue. The system also provides for insuring that any good transferred in title to a second party is an authentic article and also lists information for this party relative to the article.

Main International Patent Class: G06F-017/00

International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Claim

... subsequent purchaser with said item code; accessing said database and entering said item code; confidentially **forwarding** a **subsequent** registration **number different** from said registration number; registering said subsequent purchaser as a new owner of said...

23/3,AB,K/23 (Item 15 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00806392

TECHNOLOGY SHARING DURING ASSET MANAGEMENT AND ASSET TRACKING IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT AND METHOD THEREOF

PARTAGE TECHNOLOGIQUE LORS DE LA GESTION ET DU SUIVI DU PARC INFORMATIQUE DANS UN ENVIRONNEMENT DU TYPE CHAINE D'APPROVISIONNEMENT RESEAUTEE, ET PROCEDE ASSOCIE

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US  
(Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US,

Legal Representative:

HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th Floor,  
2029 Century Park East, Los Angeles, CA 90067-3024, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200139086 A2 20010531 (WO 0139086)

Application: WO 2000US32310 20001122 (PCT/WO US0032310)

Priority Application: US 99444653 19991122; US 99447623 19991122

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 156214  
Main International Patent Class: G06F-017/60  
Fulltext Availability: Detailed Description  
Detailed Description  
... number with the same Tirnepoint 1 (second) value. The first telephone call will have a **sequence number** set to '0.' This value increases incrementally for each successive call which originates on the same...1 0, bits 0-7 byte 1 1, bits 0-7 byte 12, bits 0- 2 NCID **Sequence Number** byte 12, bits 3-7 Not Used  
Table 44A  
After transporting the call 3602 and bits 0- 2 NCID **Sequence Number** 96 byte 12, bits 3 -7 Not Used  
Table 44B  
After transporting the call 3602...

**23/3,AB,K/24 (Item 16 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00806389

**SCHEDULING AND PLANNING BEFORE AND PROACTIVE MANAGEMENT DURING MAINTENANCE AND SERVICE IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT  
PROGRAMMATION ET PLANIFICATION ANCIPEE, ET GESTION PROACTIVE AU COURS DE LA MAINTENANCE ET DE L'ENTRETIEN D'UN ENVIRONNEMENT DU TYPE CHAINE D'APPROVISIONNEMENT RESEAUTEE**

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US  
(Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Boulevard, Hamilton, NJ 08610, US,

Legal Representative:

HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th Floor,  
2029 Century Park East, Los Angeles, CA 90067-3024, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200139082 A2 20010531 (WO 0139082)

Application: WO 2000US32228 20001122 (PCT/WO US0032228)

Priority Application: US 99447625 19991122; US 99444889 19991122

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ

VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 152479

French Abstract

L'invention concerne un systeme, un procede, et un article manufacture de gestion proactive mis en oeuvre au cours de la maintenance et de l'entretien d'un environnement du type chaine d'approvisionnement reseautee. Les appels telephoniques, les donnees et autres informations multimedia sont routes via un reseau assurant le transfert des

informations via Internet au moyen d'informations de routage telephonique et d'informations d'adresse de protocole Internet. Ledit reseau comprend un gestionnaire de seuil proactif qui avertit a l'avance les fournisseurs d'une rupture de contrat imminente. Ledit gestionnaire de seuil proactif envoie une alarme au fournisseur de services lorsque le niveau de service du moment n'atteint plus le niveau de service determine dans le contrat en termes de maintien d'un certain niveau de service.

Main International Patent Class: G06F-017/16

Fulltext Availability: Detailed Description

Detailed Description

Table 44A

After transporting the call 3602...

...1 0, bits 0-7 byte 1 1, bits 0-7 byte 12, bits 0- 2 NCID Sequence

Number byte 12, bits 3-7 Not Used...

23/3,AB,K/26 (Item 18 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00806383

**COLLABORATIVE CAPACITY PLANNING AND REVERSE INVENTORY MANAGEMENT DURING DEMAND AND SUPPLY PLANNING IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT AND METHOD THEREOF**

**PLANIFICATION EN COLLABORATION DES CAPACITES ET GESTION ANTICIPEE DES STOCKS LORS DE LA PLANIFICATION DE L'OFFRE ET DE LA DEMANDE DANS UN ENVIRONNEMENT DE CHAINE D'APPROVISIONNEMENT FONDEE SUR LE RESEAU ET PROCEDE ASSOCIE**

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US  
(Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US,

Legal Representative:

HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 1400 Page Mill Road, Palo Alto, CA 94304, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200139029 A2 20010531 (WO 0139029)

Application: WO 2000US32309 20001122 (PCT/WO US0032309)

Priority Application: US 99444655 19991122; US 99444886 19991122

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 157840

Main International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

Detailed Description

... when an NCID must be created. In step 4202, the current switch will calculate a **sequence number**. The **sequence number** represents the **number** of calls which have occurred on the same port number with the same Timepoint I...byte 10, bits 0-7

byte I 1, bits 0-7  
byte 12, bits 0-2 NCID Sequence Number  
byte 12, bits 3-7 Not Used  
Table 44A  
After transporting the call 3602 and...  
...1 0, bits 0-7  
byte I 1, bits 0-7  
byte 12, bits 0-2 NOD Sequence Number  
byte 12, bits 3-7 Not Used  
Table 44B  
After transporting the call 3602 and...

**23/3,AB,K/27 (Item 19 from file: 349)**  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00510338  
**METHODS AND APPARATUS FOR INTERNET BASED FINANCIAL TRANSACTIONS WITH EVIDENCE OF PAYMENT**  
**PROCEDE ET DISPOSITIF POUR TRANSACTIONS FINANCIERES INTERNET AVEC TRACE DE PAIEMENT**  
Patent Applicant/Assignee:  
SARANAC SOFTWARE INC,  
Inventor(s):  
LEWIS Richard,  
DWYER Tara,  
ABDELSADEK Mohammed,  
HAN Donald,  
ROGOFF Jonathon,  
PARKS Louis,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9941690 A1 19990819  
Application: WO 99US3099 19990212 (PCT/WO US9903099)  
Priority Application: US 9823724 19980213  
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 22355  
English Abstract  
A system and method for conducting Internet-based financial transaction between a client (2n) and a server (4). The client has a processor, a printer, a client authentication module, a module for issuing a transaction request, and a unique digital signature. The server has a network including a transaction server (180), a transaction database (170), a server authentication module, and a receipt generation module. An Internet connection (30) is used between the client (2n) and the server network (4). The transaction execution system includes authentication, wherein the client authentication module and the server authentication modules communicate via the Internet connection (30) and are authenticated to each other. A transaction module is included wherein, in response to the client and server being authenticated, the client (2n) issues a transaction request to the server (4) and the transaction server (180), in response to a client transaction request,

executes an electronic payment transaction at the server and records the transaction in the transaction database (170). The server receipt generation module, in response to an executed electronic payment, then generates a receipt and transmits the receipt to the client (2n).  
Main International Patent Class: G06F-017/60  
Fulltext Availability: Detailed Description

Detailed Description

... standard for digital certificates, and it defines 1 5 the following fields.  
1. Version: For **forward** and backward compatibility.  
2 . **Serial Number** : An integer that, together with the CA's name uniquely identifies this certificate.  
3. Signature...

25/6/3 (Item 3 from file: 348)

01497116

One-way roaming from ANS-41 to GSM systems

25/6/12 (Item 12 from file: 348)

00290349

Facsimile device.

25/6/20 (Item 5 from file: 349)

00889685 \*\*Image available\*\*

VIDEO SIGNAL WITH INTEGRAL DATA TRANSMISSION

25/6/28 (Item 13 from file: 349)

00739497 \*\*Image available\*\*

METHOD AND APPARATUS FOR EARLY RANDOM DISCARD OF PACKETS

25/6/32 (Item 17 from file: 349)

00548454 \*\*Image available\*\*

DIGITAL TRADING CARD, SYSTEM, AND METHOD

25/6/33 (Item 18 from file: 349)

00474445 \*\*Image available\*\*

COMMUNICATION SYSTEM AND METHOD WITH ORTHOGONAL BLOCK ENCODING

25/6/34 (Item 19 from file: 349)

00465694 \*\*Image available\*\*

METHOD AND APPARATUS FOR ICONIFYING AND AUTOMATICALLY DIALING TELEPHONE NUMBERS WHICH APPEAR ON A WEB PAGE

25/6/35 (Item 20 from file: 349)

00459165 \*\*Image available\*\*

UNIVERSAL EPISTEMOLOGICAL MACHINE (A.K.A. ANDROID)

25/6/36 (Item 21 from file: 349)

00433569

METHODS AND APPARATUS FOR A GENERAL PURPOSE REASONING PLATFORM

25/6/38 (Item 23 from file: 349)

00315156

SCALABLE MULTIMEDIA NETWORK

25/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.  
01640704

**Forming RTP packets**  
**Bildung von RTP Paketen**  
**Formant des paquets RTP**

PATENT ASSIGNEE:

SAMSUNG ELECTRONICS CO., LTD., (1093728), 416, Maetan-dong, Paldal-gu,  
Suwon-City, Kyungki-do, (KR), (Applicant designated States: all)

INVENTOR:

Kang, Sang-ug, 106-901 Indukwon Samsung Apartment, Gwanyang-2-dong,  
Dongan-gu, Anyang-city, Gyunggi-do, (KR)  
Lobo, Austin, c/o 202-804 Sungil Apartment, Maetan-3-dong, Paldal-gu,  
Suwon-city, Gyunggi-do, (KR)

LEGAL REPRESENTATIVE:

Geary, Stuart Lloyd et al (79361), Venner, Shipley & Co., 20 Little  
Britain, London EC1A 7DH, (GB)

PATENT (CC, No, Kind, Date): EP 1351472 A2 031008 (Basic)

APPLICATION (CC, No, Date): EP 2003251930 030327;

PRIORITY (CC, No, Date): KR 202017833 020401

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO

INTERNATIONAL PATENT CLASS: H04L-029/06

ABSTRACT EP 1351472 A2

An apparatus and method to generate and restore an RTP (Real-Time Transmission Protocol) packet. A setting unit assigns a CTS (Composition TimeStamp), a DTS (Decoding TimeStamp), and a PSN (Packet Sequence Number) that sequentially increase according to a packet generation order for each of a plurality of SL (Synchronization Layer) packets, extracting a time stamp length and a packet sequence number length from an SLCD (SL Configuration Descriptor) within each SL packet. A packet generating unit generates a header of the SL packet accommodated in an RTP packet header and the RTP packet based on the CTS, the DTS, the PSN, the time stamp length and the packet sequence number length.

Since only difference values in the CTS, the DTS, and the PSN information between a previous SL packet and the present SL packet, are recorded, a number of bits can be reduced if the CTS value rolls over and a multiple SL packet can be made for the SL packet having a time stamp length greater than 32 bits. Also, a condition that a DTS delta value should always be a positive number is met.

ABSTRACT WORD COUNT: 187

NOTE: Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200341	1440
SPEC A	(English)	200341	5262
Total word count - document A			6702
Total word count - document B			0
Total word count - documents A + B			6702
... CLAIMS and the DTS based on a set time stamp length; and a second changing unit <b>changing</b> the PSN based on a <b>set</b> packet <b>sequence number</b> length.			
10. A method of restoring an RTP (Real-Time Transmission Protocol) packet comprising extracting...			

**25/3,AB,K/2 (Item 2 from file: 348)**  
DIALOG(R) File 348: EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.  
01578349  
**Robust RLC reset procedure in a wireless communication system**  
**Robustes RLC-Rucksetzungsverfahren in einem drahtlosen Kommunikationssystem**  
**Methode robuste de reinitialisation RLC pour un système de communication**  
**sans fils**  
**PATENT ASSIGNEE:**  
ASUSTeK Computer Inc., (4118980), 4F, No. 150, Li-Te Rd., Peitou, Taipei  
City, (TW), (Applicant designated States: all)  
**INVENTOR:**  
Kuo, Richard Lee-Chee, 4FI., No. 21, Lane 281, Jungyang Rd., Hsinchu, 300  
, (TW)  
**LEGAL REPRESENTATIVE:**  
TER MEER STEINMEISTER & PARTNER GbR (100061), Patentanwalte,  
Mauerkircherstrasse 45, 81679 Munchen, (DE)  
**PATENT (CC, No, Kind, Date):** EP 1311081 A2 030514 (Basic)  
**APPLICATION (CC, No, Date):** EP 2002024661 021105;  
**PRIORITY (CC, No, Date):** US 338148 P 011113  
**DESIGNATED STATES:** AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
IE; IT; LI; LU; MC; NL; PT; SE; SK; TR  
**EXTENDED DESIGNATED STATES:** AL; LT; LV; MK; RO; SI  
**INTERNATIONAL PATENT CLASS:** H04L-001/18  
**ABSTRACT EP 1311081 A2**  
In the AM RLC reset procedure of a wireless communication system, a delayed Reset ACK PDU will cause un-synchronization between the Sender and the Receiver. This invention of method and system checks for arriving of the first and the second Reset PDUs and the first and the second Reset ACK PDUs first, then selectively updates the status-related variables and HFN values to synchronize the Sender and the Receiver.

**ABSTRACT WORD COUNT: 69**

**NOTE:** Figure number on first page: 6A

**LANGUAGE (Publication, Procedural, Application):** English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200320	1204
SPEC A	(English)	200320	2249
Total word count - document A			3453
Total word count - document B			0
Total word count - documents A + B			3453

... CLAIMS a corresponding Reset ACK package with the same reset sequence number and the Receiver's updated second data package sequential number.

2 . A system as claimed in claim 1, where the Sender is an UE and the...

**25/3,AB,K/4 (Item 4 from file: 348)**  
DIALOG(R) File 348: EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.  
01026196  
**COMMUNICATION SYSTEM AND METHOD WITH ORTHOGONAL BLOCK ENCODING**  
**KOMMUNIKATIONSSYSTEM UND VERFAHREN MIT ORTHOGONALEN BLOCKKODIERUNG**  
**SYSTEME ET PROCEDE DE COMMUNICATION PAR CODAGE A BLOC ORTHOGONAL**  
**PATENT ASSIGNEE:**  
ERICSSON INC., (1203497), One Triangle Park, P.O. Box 13969, Research  
Triangle Park, NC 27709, (US), (Proprietor designated states: all)  
**INVENTOR:**

DENT, Paul, Wilkinson, 637 Eagle Point Road, Pittsboro, NC 27312, (US)  
LEGAL REPRESENTATIVE:

HOFFMANN - EITLE (101511), Patent- und Rechtsanwalte Arabellastrasse 4,  
81925 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 998794 A2 000510 (Basic)  
EP 998794 B1 030402  
WO 99005797 990204

APPLICATION (CC, No, Date): EP 98934458 980715; WO 98US14432 980715

PRIORITY (CC, No, Date): US 898392 970722

DESIGNATED STATES: DE; FI; FR; GB; IT

INTERNATIONAL PATENT CLASS: H04B-001/707; H04L-001/08

NOTE: No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
----------------	----------	--------	------------

CLAIMS B	(English)	200314	2352
CLAIMS B	(German)	200314	2025

CLAIMS B	(French)	200314	2520
----------	----------	--------	------

SPEC B	(English)	200314	6474
--------	-----------	--------	------

Total word count - document A	0
-------------------------------	---

Total word count - document B	13371
-------------------------------	-------

Total word count - documents A + B	13371
------------------------------------	-------

... CLAIMS bits in each group in accordance with an orthogonal coding sequence;

interleaving (18) the sign **changed** bits from the preselected **number** of **groups** to **successively** generate a **number** of repeated **groups** each having a collective sign **change** corresponding to a common sign change shared by all sign-changed bits of the information...with an orthogonal code associated with the transmitter;

an interleaver (18) for interleaving the sign **changed** bits from the preselected **number** of **groups** to **successively** generate a **number** of blocks each composed of the different sign changed bits of the preselected number of...

**25/3,AB,K/5 (Item 5 from file: 348)**

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.  
00904108

Error compensating method and apparatus and medium storing an error compensation program

Verfahren und Vorrichtung zur Fehlerkompensation sowie das Fehlerkompensationsprogramm speicherndes Speichermedium

Procede et dispositif de compensation des erreurs, et moyen de stockage de programme de compensation des erreurs

PATENT ASSIGNEE:

NIPPON TELEGRAPH AND TELEPHONE CORPORATION, (686333), 19-2,  
Nishi-Shinjuku 3-chome, Shinjuku-ku, Tokyo 160, (JP), (Applicant  
designated States: all)

INVENTOR:

Yoshioka, Masafumi, 107, 3-14, Hinode-cho, Yokosuka-shi, Kanagawa-ken,  
(JP)

Ohta, Atsushi, B-304, 9-2-12, Sugita, Isogo-ku, Yokohama-shi,  
Kanagawa-ken, (JP)

Umeshira, Masahiro, F-403, Fureainomachi, Nokendai, Kanazawa-ku,  
Yokohama-shi, Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

Poulin, Gerard et al (17984), BREVALEX 3, rue du docteur Lancereaux,

75008 Paris, (FR)  
PATENT (CC, No, Kind, Date): EP 825738 A2 980225 (Basic)  
EP 825738 A3 010207

APPLICATION (CC, No, Date): EP 97401965 970821;

PRIORITY (CC, No, Date): JP 96222480 960823

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: H04L-001/18

ABSTRACT EP 825738 A2

An object of the present invention is to improve the transmission efficiency and reduce circuit size in error compensating techniques where bit errors occurring during transmission are compensated for by retransmission.

Transmission equipment get sequence number(s) from control information and sequence numbers which follows from the sequence number which correspond to newest data packet amongst the sequence numbers, and transmits data packet corresponding to these sequence numbers at a predetermined timing. On the other hand, reception equipment receives data packet from the transmission equipment, and manages the sequence numbers of not yet received data packets. The reception equipment then sends back sequence number(s) of predetermined number, which is smaller number than the maximum number of data packets which is sent from transmission equipment at a predetermined timing, which correspond to not yet received data packet as control information for each predetermined timing.

ABSTRACT WORD COUNT: 143

NOTE: Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9809	4013
SPEC A	(English)	9809	8842
Total word count - document A			12855
Total word count - document B			0
Total word count - documents A + B			12855

... CLAIMS for assigning said sequence numbers which is accommodated in the received control information and a series of sequence numbers following from the sequence number corresponding to the newest data packet amongst said sequence numbers, a transmission control circuit (103A...).

... for assigning said sequence numbers which is accommodated in the received control information and a series of sequence numbers following from the sequence number corresponding to the newest data packet amongst said sequence numbers, a transmission control circuit (103A...).

25/3, AB, K/7 (Item 7 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00674921

Method and device for processing banknotes sheets up into bundles  
Verfahren und Vorrichtung zum Verarbeiten von Wertscheinbogen zu  
Wertscheinbündeln

Procede et dispositif pour travailler des feuilles de billets de banque  
jusqu'a la préparation de paquets de billets

PATENT ASSIGNEE:

DE LA RUE GIORI S.A., (294210), 4, rue de la Paix, 1003 Lausanne, (CH),

Serial 09//693563

January 29, 2004

(applicant designated states: AT;CH;DE;FR;GB;IT;LI;SE)

## INVENTOR:

Wyssmann, Hans, Gehrenholz H12, CH-8055 Zurich, (CH)

## LEGAL REPRESENTATIVE:

Jorche, Dietrich R.A. et al (25691), c/o BUGNION S.A. Conseils en Propriete Industrielle 10, route de Florissant Case postale 375, 1211 Geneve 12 Champel, (CH)

PATENT (CC, No, Kind, Date): EP 646459 A1 950405 (Basic)  
EP 646459 B1 971029

APPLICATION (CC, No, Date): EP 94810490 940829;

PRIORITY (CC, No, Date): CH 932941 930930

DESIGNATED STATES: AT; CH; DE; FR; GB; IT; LI; SE

INTERNATIONAL PATENT CLASS: B41F-033/00; B41K-003/12;

ABSTRACT EP 646459 A1 (Translated)

A series of H banknote sheets, for example 100 sheets, is first checked for misprints and the banknote positions of each sheet which have misprints are stored in a computer. The sheets of this series then pass a numbering machine (4) having freely programmable numbering units which are controlled by the computer. Numbering takes place in such a way that all the perfect banknote prints within the sheet series, excluding the misprints, acquire a continuous number sequence, the number sequence of H banknotes in one and the same banknote position being a continuation of the number sequence of the H banknotes in an adjacent banknote position. The next series of H sheets acquires the consecutive number sequence. After numbering, sheet stacks (FH), each with H sheets, are formed, these stacks are cut into banknote stacks (W), and these banknote stacks, ordered according to consecutive numbering, are fed to a separating-out and bundling device (9), in which the misprints are removed and, in each case, H successive perfect banknotes are combined to form a bundle (WB) having a complete number sequence. Ten bundles in each case are packaged into a banknote package (P).

TRANSLATED ABSTRACT WORD COUNT: 195

LANGUAGE (Publication,Procedural,Application): German; German; German  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9710W4	1340
CLAIMS B	(German)	9710W4	1045
CLAIMS B	(French)	9710W4	1425
SPEC B	(German)	9710W4	3330

Total word count - document A 0

Total word count - document B 7140

Total word count - documents A + B 7140

... CLAIMS notes are combined to form a bundle (WB) having a complete sequence of numbers, bundles following one another having notes with successive sequences of numbers.

2 . The process as claimed in claim 1, characterised in that the numbering machine (4) used...

25/3,AB,K/9 (Item 9 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00635392

Data back-up in data processing systemDatensicherung in einer DatenverarbeitungsanlageSauvegarde des donnees dans un systeme de traitement des donnees

PATENT ASSIGNEE:

Serial 09//693563

January 29, 2004

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

## INVENTOR:

Shomler, Robert Wesley, 17015 Piedmont Court, Morgan Hill, California  
95037, (US)

McIlvain, James E., 1118 Silver Oak Court, California 95120, (US)

## LEGAL REPRESENTATIVE:

Litherland, David Peter (75471), IBM United Kingdom Limited Intellectual  
Property Department Hursley Park, Winchester, Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 617362 A1 940928 (Basic)  
EP 617362 B1 980603

APPLICATION (CC, No, Date): EP 94104195 940317;

PRIORITY (CC, No, Date): US 36017 930323

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-011/20; G06F-011/14;

ABSTRACT EP 617362 A1

A method and means for asynchronous remote data duplexing at a distant location from copies based at a primary site storage subsystem, which copying is non-disruptive to executing applications, and further in which any data loss occasioned by losses in flight or updates never received at the time of any interruption between the primary and remote sites are accounted for at the remote site. The method assigns a token and unique **sequence number** responsive to each write operation at the primary site, and sends the tokens + numbers and data updates to the remote site. The method relies upon the **sequence number** to establish a sequence and define gaps therein to ascertain missing updates. (see image in original document)

ABSTRACT WORD COUNT: 121

LANGUAGE (Publication,Procedural,Application): English; English; English

## FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9823	529
CLAIMS B	(German)	9823	554
CLAIMS B	(French)	9823	664
SPEC B	(English)	9823	5009
Total word count - document A			0
Total word count - document B			6756
Total word count - documents A + B			6756

25/3,AB,K/10 (Item 10 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00361667

Contiguous floor channeling elevator dispatching.

Aufzugsverteilung durch Sektoren von benachbarten Stockwerken.

Repartition d'ascenseurs par secteurs de paliers contigus.

## PATENT ASSIGNEE:

OTIS ELEVATOR COMPANY, (311771), 10 Farm Springs, Farmington, CT 06032,  
(US), (applicant designated states: CH;DE;ES;FR;GB;IT;LI)

## INVENTOR:

Thangavelu, Kandasamy, 70 Deepwood Drive, Avon Connecticut, (US)

Bittar, Joseph, 31 Longview Road, Avon Connecticut, (US)

## LEGAL REPRESENTATIVE:

Tomlinson, Kerry John et al (36771), Frank B. Dehn & Co. European Patent  
Attorneys Imperial House 15-19 Kingsway, London WC2B 6UZ, (GB)

PATENT (CC, No, Kind, Date): EP 328423 A1 890816 (Basic)

EP 328423 B1 931215

APPLICATION (CC, No, Date): EP 89301358 890213;  
PRIORITY (CC, No, Date): US 157542 880212; US 157543 880212  
DESIGNATED STATES: CH; DE; ES; FR; GB; IT; LI  
INTERNATIONAL PATENT CLASS: B66B-001/20;  
ABSTRACT EP 328423 A1

An elevator system contains a group of elevator cars (2). A group controller (32) contains signal processing means for controlling the dispatching of the cars from a main floor. During up-peak conditions, each car is dispatched from the main floor to a "sector" of contiguous floors. Sectors are contiguous. Floors that constitute a sector are assigned exclusively to a car and are displayed on an indicator (SI) at the lobby. Sectors are selected for assignment according a preset order. Cars are selected for assignment to a selected sector according to a preset order. If no car calls are made to the floors in the assigned sector, the next sector is selected along with the next car. When an up hall call is made during the up peak period, the car that is most able to serve the call is selected from those cars assigned to a sector in the upper 2/3 of the building. Cars serving floors in the lower 1/3 of the building are never assigned to up hall calls during the up peak period.

ABSTRACT WORD COUNT: 180

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1331
CLAIMS B	(German)	EPBBF1	1328
CLAIMS B	(French)	EPBBF1	1571
SPEC B	(English)	EPBBF1	4204

Total word count - document A 0  
Total word count - document B 8434  
Total word count - documents A + B 8434

...CLAIMS the sector after the sector is assigned to the car.

3. An elevator system according to claim 1 or 2, characterised in that said **sequence** comprises assigning each car (1,2,3,4) and sector (SN) a number and following...

25/3, AB, K/11 (Item 11 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.  
00335610

Method and apparatus for performing optical time domain reflectometry.  
Verfahren und Vorrichtung zum Anwenden von optischen Zeitbereichsreflektometern.

Procede et dispositif d'utilisation de reflectometrie optique a domaine de temps.

PATENT ASSIGNEE:

Hewlett-Packard GmbH, (292551), Herrenberger Strasse 130 Postfach 14 30, W-7030 Boblingen, (DE), (applicant designated states: DE;FR;GB)

INVENTOR:

Beller, Josef, Peter-Cornelius-Strasse 2, W-7410 Reutlingen, (DE)

LEGAL REPRESENTATIVE:

Harbach, Thomas (60391), Hewlett-Packard GmbH, Europ. Patent- und Lizenzabteilung, Postfach 14 30, W-7030 Boblingen, (DE)

PATENT (CC, No, Kind, Date): EP 379609 A1 900801 (Basic)  
EP 379609 B1 930728

APPLICATION (CC, No, Date): EP 89101168 890124;

PRIORITY (CC, No, Date): EP 89101168 890124.

Serial 09//693563

January 29, 2004

DESIGNATED STATES: DE; FR; GB  
 INTERNATIONAL PATENT CLASS: G01M-011/00;  
 ABSTRACT EP 379609 A1

In a method and a corresponding apparatus for performing optical time domain reflectometry predetermined time sequences of light signals (A(min), B(min)) are injected into an optical fiber and the signals backscattered from the fiber are correlated with the injected sequences. The injected time sequences are selected according to a specific code such that after each element in the code represented by "1" or "-1" a predetermined number of elements represented by "0" is provided. Depending on the number of inserted "0"s after each "1" or "-1" sidelobes in the correlation product appear at certain predictable positions. By choosing the numbers of inserted "0"s differently for different injections, the resulting sidelobes appear at different positions in the corresponding correlation products. From the correlation products of such different injections, a composite fiber response can be derived wherein sidelobes are substantially eliminated. The codes used can be derived, for example, from Golay complementary codes.

ABSTRACT WORD COUNT: 155

LANGUAGE (Publication,Procedural,Application): English; English; English

## FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1002
CLAIMS B	(German)	EPBBF1	869
CLAIMS B	(French)	EPBBF1	1139
SPEC B	(English)	EPBBF1	4477
Total word count - document A			0
Total word count - document B			7487
Total word count - documents A + B			7487

...CLAIMS each light signal of the common basic time sequence (A,B), wherein the second predetermined **number** differs **from** the first predetermined **number**.

2 . A **method** according to claim 1, characterized in that the common basic sequence is a set of...

...magnitudes of sidelobes relative to the magnitudes of peaks originating from reflections in the fiber.

4 . A **method** according to **claim 2 or 3**, characterized by the **following** additional steps:

- determining the positions of peaks originating from reflections in the fiber (10),

- calculating...

...adjacent sample values.

5. A method according to claim 2 or 3, characterized by the **following** steps :

- **successively** injecting a **number of** modified complementary sequences into the fiber (10) with the numbers (X<sub>1</sub> -1 ; X...

**25/3,AB,K/13 (Item 13 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.  
 00273784

**Digital code conversion apparatus.**

**Gerat zur digitalen Kodeumwandlung.**

**Appareil pour la conversion de code numerique.**

PATENT ASSIGNEE:

SONY CORPORATION, (214021), 7-35 Kitashinagawa 6-chome Shinagawa-ku,

Tokyo 141, (JP), (applicant designated states: AT;DE;FR;GB;SE)

INVENTOR:

Isozaki, Masaaki, c/o Sony Corporation 7-35 Kitashinagawa 6-chome,  
Shinagawa-ku Tokyo, (JP)  
Takano, Kazuhiro, c/o Sony Corporation 7-35 Kitashinagawa 6-chome,  
Shinagawa-ku Tokyo, (JP).

LEGAL REPRESENTATIVE:

Ayers, Martyn Lewis Stanley et al (42851), J.A. KEMP & CO. 14 South  
Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 273687 A1 880706 (Basic)  
EP 273687 B1 940323

APPLICATION (CC, No, Date): EP 87311306 871222;

PRIORITY (CC, No, Date): JP 86311604 861227; JP 8733897 870217

DESIGNATED STATES: AT; DE; FR; GB; SE

INTERNATIONAL PATENT CLASS: G11B-020/10; H03M-005/14;

ABSTRACT EP 273687 A1

A digital code modulation circuit converts input data formed of **sequentially** received **serial data** into parallel data such that each parallel data has input data for reference in both preceding and following parallel data, and thereupon applies a code conversion to the parallel data and thereby executes modulation of the input data in parallel. Conversely, a digital code demodulation circuit applies a code conversion to input data formed of **serial data sequentially** input thereto to form parallel data such that each parallel data has input data for reference in both the preceding and following parallel data and thereby executes demodulation of the input data in parallel.

ABSTRACT WORD COUNT: 110

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	662
CLAIMS B	(German)	EPBBF1	628
CLAIMS B	(French)	EPBBF1	793
SPEC B	(English)	EPBBF1	10823
Total word count - document A			0
Total word count - document B			12906
Total word count - documents A + B			12906

...CLAIMS sub(n))1 to M( sub(n+1))2).

3. A digital code conversion apparatus **according** to claim 1 or 2  
**wherein** the **serial** -to-parallel converter means (2) receives as input data NRZ data.
4. A digital code...

25/3,AB/14 (Item 14 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00270804

Coding system for reducing redundancy.

Kodierungssystem zur Reduktion der Redundanz.

Systeme de codage reduisant la redondance.

PATENT ASSIGNEE:

COMPRESSION LABS, INC., (522700), 2305 Bering Drive, San Jose California  
95131, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Chen, Wen-hsiung, 668 Inverness Way, Sunnyvale California 94087, (US)  
Klenke, Daniel J., 492 Curtner Drive, Milpitas California 95035, (US)

Serial 09//693563

January 29, 2004

## LEGAL REPRESENTATIVE:

Crawford, Andrew Birkby et al (29761), A.A. THORNTON & CO. Northumberland  
 House 303-306 High Holborn, London WC1V 7LE, (GB)

PATENT (CC, No, Kind, Date): EP 266049 A2 880504 (Basic)  
 EP 266049 A3 891115  
 EP 266049 B1 940309

APPLICATION (CC, No, Date): EP 87308272 870918;

PRIORITY (CC, No, Date): US 923630 861027

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: H03M-007/46; H04N-007/137;

ABSTRACT EP 266049 A2

A signal processor and method for efficiently processing signals using ordered redundancy (or) coding in different modes. Signals to be coded are multivalued digital numbers, in which the probable frequency of occurrence of some values is different than for other values. The system codes the highest most frequently occurring values (0's in the usual example) using runlength coding. The runlength encoding is of two types. The first type is utilized when a runlength of consecutive zeros (0's) is followed by the next most frequently occurring value and the other type is utilized when the runlength of consecutive zeros (0's) is followed by some other value.

ABSTRACT WORD COUNT: 109

LANGUAGE (Publication,Procedural,Application): English; English; English

## FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1980
CLAIMS B	(German)	EPBBF1	1832
CLAIMS B	(French)	EPBBF1	2543
SPEC B	(English)	EPBBF1	10143
Total word count - document A			0
Total word count - document B			16498
Total word count - documents A + B			16498

**25/3,AB,K/15 (Item 15 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.  
 00218983

Method for multiprocessor communications.

Kommunikationsverfahren fur Multiprozessor.

Methode de communication pour multiprocesseur.

## PATENT ASSIGNEE:

TANDEM COMPUTERS INCORPORATED, (524030), 19333 Vallco Parkway, Cupertino California 95014-2599, (US), (applicant designated states:  
 AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

## INVENTOR:

Carr, Richard W., 3462 Murdoch Court, Palo Alto California 94306, (US)

## LEGAL REPRESENTATIVE:

Milhensch, Howard Leslie et al (33863), R.G.C. Jenkins & Co. 26 Caxton Street, London SW1H 0RJ, (GB)

PATENT (CC, No, Kind, Date): EP 204449 A2 861210 (Basic)  
 EP 204449 A3 890118  
 EP 204449 B1 920610

APPLICATION (CC, No, Date): EP 86303684 860514;

PRIORITY (CC, No, Date): US 741659 850605

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: G06F-015/16; G06F-011/00;

ABSTRACT EP 204449 A2

An improved method for communicating updated information among processors in a distributed data processing system is disclosed. The system includes a plurality of distributed interconnected processors each having a memory. The method includes the steps of prioritizing the processors into a predetermined order, establishing one of the processors as a control processor for the broadcast of update messages, developing an update message in at least one of the processors, selecting in accordance with the control processor one of the processors which has developed an update message as a sender processor, broadcasting the update message of the sender processor to each of the processors, and causing the next processor in order to be selected as control processor in the event that the former control processor fails in service. As one preferred use, the method enables the system to transmit atomic global update messages with a tolerance to multiple processor faults.

ABSTRACT WORD COUNT: 153

LANGUAGE (Publication, Procedural, Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	2738
CLAIMS B	(German)	EPBBF1	849
CLAIMS B	(French)	EPBBF1	1097
SPEC B	(English)	EPBBF1	7734
Total word count - document A			0
Total word count - document B			12418
Total word count - documents A + B			12418

... CLAIMS The method for communicating updated information set forth in claim 3 wherein each processor compares the update sequence number for the update message received with the update sequence number previously recorded in the processor corresponding to the...

25/3, AB, K/17 (Item 2 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
01019361

APPLICATION GATEWAY SYSTEM, AND METHOD FOR MAINTAINING SECURITY IN A PACKET-SWITCHED INFORMATION NETWORK  
SYSTEME DE PASSERELLE D'APPLICATIONS ET PROCEDE PERMETTANT D'ASSURER LA SECURITE DANS UN RESEAU INFORMATIQUE A COMMUTATION PAR PAQUETS

Patent Applicant/Assignee:

SSH COMMUNICATIONS SECURITY CORPORATION, Fredrikinkatu 42, FIN-00100 Helsinki, FI, FI (Residence), FI (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

YLONEN Tatu, Taysikuu 10 C 88, FIN-02210 Espoo, FI, FI (Residence), FI (Nationality), (Designated only for: US)

KIVINEN Tero, Lukupuronrinne 2 i 17, FIN-02200 Espoo, FI, FI (Residence), FI (Nationality), (Designated only for: US)

LEVLIN Markus, Limingantie 73 as. 19, FIN-00560 Helsinki, FI, FI (Residence), FI (Nationality), (Designated only for: US)

TARKKALA Lauri, Leppavaarankatu 17 C 19, FIN-02600 Espoo, FI, FI (Residence), FI (Nationality), (Designated only for: US)

Legal Representative:

BERGGREN OY AB (agent), P. O. Box 16, Jaakonkatu 3 A, FIN-00101 Helsinki, FI,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200349400 A1 20030612 (WO 0349400)  
Application: WO 2002FI1001 20021209 (PCT/WO FI0201001)  
Priority Application: US 200120299 20011207  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK  
TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18372

#### English Abstract

A method and apparatuses are disclosed for handling digital data packets at a logical borderline that separates an untrusted packet-switched information network from a protected domain. A packet processor part intercepts a packet that is in transit between the untrusted packet-switched information network and the protected domain. The packet is examined at the packet processor part in order to determine, whether the packet contains digital data that pertains to a certain protocol. If the packet is not found to contain such digital data, it is processed at the packet processor part. If the packet is found to contain digital data that pertains to said certain protocol, it gets redirected to an application gateway part that processes the packet according to a set of processing rules based on obedience to said certain protocol. The packet processor part is a kernel mode process running in a computer device and the application gateway part is a user mode process running in a computer device.

Fulltext Availability: Claims

#### Claim

... Protocol or RTP, which is discussed in the known IETF document RFC 1889. It requires two consecutive port numbers of which one is for data and the other is for control. Dynamic changes can be utilized so that when an RTP application gateway part detects the arrival of...be redirected. It is not necessarily the application gateway part that reacts to achieve dynamic changes in redirecting. At least in cases where a certain protocol requires two or more port...  
...these port numbers are easy to deduce from each other (like in the case of two consecutive port numbers), the packet processor part can achieve dynamic changing for itself. When the packet processor part...

25/3,AB,K/19 (Item 4 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00925664

#### SERVER FARM INFORMATION PROCESSING SYSTEM AND METHOD OF OPERATION SYSTEME DE TRAITEMENT DE L'INFORMATION PAR BATTERIE DE SERVEURS ET PROCEDE D'EXPLOITATION

Patent Applicant/Assignee:

REBA TECHNOLOGIES INC, 508 Newhall Cove, Austin, TX 78746, US, US  
(Residence), US (Nationality)

Inventor(s):

BERG Mitchell T, 435 10th Avenue, Kirkland, WA 98033, US,

Serial 09//693563

January 29, 2004

## Legal Representative:

DAVIS Michael A Jr (et al) (agent), Haynes & Boone, LLP, Suite 1600, 600  
Congress Avenue, Austin TX 78701-3236, US,

## Patent and Priority Information (Country, Number, Date):

Patent: WO 200259742 A1 20020801 (WO 0259742)

Application: WO 2001US49285 20011218 (PCT/WO US0149285)

Priority Application: US 2000257456 20001221; US 2001872081 20010601; US  
2001872329 20010601; US 2001872332 20010601; US 2001872372 20010601; US  
2001872376 20010601; US 2001872539 20010601; US 2001873018 20010601; US  
2001873019 20010601

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 33398

## English Abstract

Through a first network (Internet Connection), a first computing device (Router A) receives an information packet (Client Request to Server 1) originating from a client. In response to the information packet, the first computing device identifies a computing device that stores a data structure of a connection with the client (Server 2:IP 123.123.123.3). If the identified computing device is the first computing device, the first computing device performs an operation in response to the information packet. If the identified computing device is a second computing device, the first computing device outputs the information packet through a second network to the second computing device, such that the output information packet bypasses the first network. The second computing device performs the operation in response to the information packet.

Fulltext Availability: Claims

## Claim

... of the connection. 144. The system of Claim 143 wherein the data structure includes a group of **sequence numbers** associated with the connection. 145. The system of Claim 143 wherein the...with the client. 162. The method of Claim 161 wherein the data structure includes a group of **sequence numbers** associated with the connection. 163. The method of Claim 161 wherein the application is a...  
...of the connection. 165. The method of Claim 164 wherein the data structure includes a **group of sequence numbers** associated with the connection. 78  
. The method of Claim 164 wherein the application is a...  
...of the connection. 168. The method of Claim 167 wherein the data structure includes a **group of sequence numbers** associated with the connection. 169. The method of Claim 167 wherein the application of the...  
...of the connection. 79  
. The method of Claim 170 wherein the data structure includes a **group of sequence numbers** associated with the connection. 172. The method of Claim 170 wherein the application of the...

(c) 2004 WIPO/Univentio. All rts. reserv.  
00843189

**SEGMENTATION AND REASSEMBLY OF DATA FRAMES**  
**SEGMENTATION ET REASSEMBLAGE DE TRAMES DE DONNEES**

Patent Applicant/Assignee:

INTEL CORPORATION, 2200 Mission College Boulevard, Santa Clara, CA 95054,  
US, US (Residence), US (Nationality)

Inventor(s):

GROW Robert M, 15599 Harrow Lane, Poway, CA 92064, US,  
OSMAN Fazil I, 3668 Camino Bajada, Escondido, CA 92025, US,  
ZABA Vitek, 9664 Paseo Montril, San Diego, CA 92129, US,  
PEYSER Robert J, 9851 East Kleindale, Tucson, AZ 85749, US,

Legal Representative:

WISE Roger R (et al) (agent), Pillsbury Winthrop LLP, 725 South Figueroa  
Street, Suite 2800, Los Angeles, CA 90017-5406, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200176139 A2-A3 20011011 (WO 0176139)  
Application: WO 2001US10123 20010328 (PCT/WO US0110123)  
Priority Application: US 2000539795 20000331

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8731

English Abstract

Embodiments of the present invention are directed to a system and method of transmitting data frames between a plurality of input ports and plurality of output ports. The input ports segment portions of the received data frames to provide smaller data cells which are individually transmitted via a logical crossbar to an output port associated with a destination of the segmented data frame. Based upon information provided in the data cells received at the outport, the outport determines the ordinal position of the received data cells within the segmented data frame and reassembles the data frame which was segmented at the input port. The outport forwards the reassembled frame toward the associated destination.

Fulltext Availability: Claims

Claim

... among the forwarded data cells associated with the data frame based upon data in the **forwarded** data cell representative of the **sequence number**.

2 The method of claim 1, the method further comprising, at each input port...

25/3,AB,K/22 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00817119

**METHOD AND APPARATUS FOR GIGABIT PACKET ASSIGNMENT FOR MULTITHREADED PACKET PROCESSING**

**PROCEDE ET DISPOSITIF D'ATTRIBUTION DE PAQUETS TRES HAUT DEBIT, DANS LE**

Serial 09//693563

January 29, 2004

**TRAITEMENT MULTIFILIERE DE PAQUETS****Patent Applicant/Assignee:**

INTEL CORPORATION, 2200 Mission College Boulevard, Santa Clara, CA 95052,  
US, US (Residence), US (Nationality), (For all designated states  
except: US)

**Patent Applicant/Inventor:**

WOLRICH Gilbert, 4 Cider Mill Road, Framingham, MA 01701, US, US  
(Residence), US (Nationality), (Designated only for: US)  
BERNSTEIN Debra, 443 Peakham Road, Sudbury, MA 01776, US, US (Residence),  
US (Nationality), (Designated only for: US)  
ADILETTA Matthew J, 20 Monticello Drive, Worcester, MA 01603, US, US  
(Residence), US (Nationality), (Designated only for: US)  
HOOPER Donald F, 19 Main Circle, Shrewsbury, MA 01545, US, US (Residence)  
, US (Nationality), (Designated only for: US)

**Legal Representative:**

HARRIS Scott C (agent), Fish & Richardson P.C., 4350 La Jolla Village  
Drive, Suite 500, San Diego, CA 92122, US,

**Patent and Priority Information (Country, Number, Date):**

Patent: WO 200150679 A2-A3 20010712 (WO 0150679)  
Application: WO 2000US33405 20001207 (PCT/WO US0033405)  
Priority Application: US 99474650 19991229

**Parent Application/Grant:**

Related by Continuation to: US 99474650 19991229 (CON)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 11885

**English Abstract**

A network processor that has multiple processing elements, each supporting multiple simultaneous program threads with access to shared resources in an interface. Packet data is received from high-speed ports in segments and each segment is assigned to one of the program threads. Each packet may be assigned to a single program thread, two program threads - one for header segment processing and the other for handling payload segment(s) - or a different program thread for segment of data in a packet. Dedicated inputs for ready status and sequence numbers provide assistance needed for receiving the packet data over a high speed port. The dedicated inputs are used to monitor ready flags from the high speed ports on a cycle-by-cycle basis. The **sequence numbers** are used by the assigned threads to maintain ordering of segments within a packet, as well as to order the writes of the complete packets to transmit queues.

Fulltext Availability: Claims

**Claim**

... units of data as they are received from the first port and maintains a second **set of sequence numbers** for use by the receive processing program threads in determining the order in which the...  
...data.

25 An article comprising a computer-readable medium which stores computer-executable instructions for **forwarding** data, the instructions causing a

Serial 09//693563

January 29, 2004

computer to:

associate control information with data received from a...from the first port.

26 The article of claim 25, wherein the control information includes sequence numbers .

2 7 . The article of claim 26, wherein the instructions to use the associated control information...

**25/3,AB,K/23 (Item 8 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00813510

**DIGITAL TRADING CARD, SYSTEM, AND METHOD**

**CARTE DE COLLECTION NUMERIQUE, SYSTEME ET PROCEDE**

Patent Applicant/Assignee:

CYBERACTION INC, Suite 3B, 126 Fifth Avenue, New York, NY 10001, US, US  
(Residence), US (Nationality)

Inventor(s):

FILLER David, Apartment 3008, 650 West Avenue, Miami Beach, FL 33139, US,  
TUREAUD Christian, Apartment 3008, 650 West Avenue, Miami Beach, FL 33139  
, US,

MARION Martin, Apartment 3, 26 Washington Square North, New York, NY  
10011, US,

SEIDMAN Deborah, 5 Rose Hill Road, Sufern, NY 10901, US,  
ERSAVAS Mehmet T, Apartment 4-D, 550 West 172nd Street, New York, NY  
10035, US,

DELAPENA Michael, 195 5th Avenue #3R, Brooklyn, NY 11217, US,

Legal Representative:

MORRIS Francis E (et al) (agent), Pennie & Edmonds LLP, 1155 Avenue of  
the Americas, New York, NY 10036, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200147166 A1 20010628 (WO 0147166)

Application: WO 2000US34892 20001221 (PCT/WO US0034892)

Priority Application: US 99469005 19991221

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 14262

English Abstract

A communication network based system for distributing, collecting, playing, and trading digital trading cards and other digital collectibles is disclosed. The system preferably includes the digital trading cards, a server (10) and related databases (30, 40, 50, 60, 65)), user computers, and user software for accessing the digital trading cards. In the preferred embodiment, the digital trading cards are issued in limited editions and the digital trading cards are uniquely associated with a user that has obtained the cards. The digital trading cards may then only be accessed by the user. The digital trading cards include multiple faces. Preferably, a first front of the cards includes an artwork (e.g.,

a photo, an illustration, or an enhanced photo composition) and a second front includes an audio/visual screen. The digital trading cards also preferably have multiple backs which may include, for example, information on a particular person or topic as well as games. Moreover, the cards can access the server to download and display current information in real-time. Advantageously, one of the faces of the limited edition cards may also display the unique serial number for the card. Users may also connect to the server to utilize the cards in on-line games.

Fulltext Availability: Claims

Claim

... and the user.

33 The method of claim 32, wherein the identifier code is a **serial number** of a limited **set of serial numbers**.

- 46

, In a communication-network based digital collectible object system, a method of uniquely associating...

...the step of downloading the digital collectible object to the user's computer includes 30 **updating** the directory in the user's computer...

**25/3, AB/24 (Item 9 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.  
00739517

**A HIGH PERFORMANCE NETWORK INTERFACE  
INTERFACE RESEAU HAUTE PERFORMANCE**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US  
GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US  
WATKINS John, 1469 Yukon Drive, Sunnyvale, CA 94087, US  
CHENG Linda, 1318 Burkette Drive, San Jose, CA 95129, US

Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 5, 399 Sherman Avenue, Palo Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052904 A1 20000908 (WO 0052904)

Application: WO 2000US5349 20000229 (PCT/WO US0005349)

Priority Application: US 99259765 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 78802

English Abstract

A network interface receives a packet from a network and transfers it to a host computer system. A header portion of the packet is parsed by a parser module to determine if the packet conforms to a predetermined protocol. A flow database is maintained by a flow database manager to

reflect the creation, termination and activity of communication flows. A re-assemble engine re-assembles data portions of multiple packets from a single communication flow. Header portions of re-assembled packets are stored in a header buffer. When multiple packets in one flow are transferred to the host, a packet batching module enables their header portions to be processed collectively rather than being interspersed with other packets. A packet queue stores packets awaiting transfer to the host and a control queue stores information concerning the waiting packets. If the packet queue becomes saturated with packets, a random packet may be discarded.

**25/3,AB,K/25 (Item 10 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00739510

**DYNAMIC PARSING IN A HIGH PERFORMANCE NETWORK INTERFACE**  
**ANALYSE DYNAMIQUE DANS UNE INTERFACE RESEAU HAUTE PERFORMANCE**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US

Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 5, 399 Sherman Avenue, Palo Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052897 A2 20000908 (WO 0052897)

Application: WO 2000US5348 20000229 (PCT/WO US0005348)

Priority Application: US 99258955 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 31072

English Abstract

A high performance network interface parses one or more headers of a packet received from a network to determine whether the packet conforms to a predetermined protocol. A packet conforming to a particular protocol may be more completely parsed than a packet conforming to another protocol. Instructions for parsing a packet to determine a protocol and to extract useful data are stored in a writeable random-access memory. The parsing instructions may be replaced, modified or supplemented according to the composition of network traffic and/or the protocols selected for enhanced processing. A parsing instruction may be executed by a micro-sequencer to extract a value from a header and compare it to a test value. If the comparison succeeds, parsing continues along a first branch; if the comparison succeeds it continues along a second branch. An offset to a parsing position within the packet is updated as the packet is parsed.

Fulltext Availability: Claims

Serial 09//693563

January 29, 2004

Claim

... 8

YES

NO TEAR DOWN FLOW;  
TO FOLLOW? SELECT OPCODE 3 FOR

0 PACKET

626

UPDATE FLOW SEQUENCE

NUMBER &amp; ACTIVITY

INDICATOR; SET FLOW

VALIDITY INDICATOR

622

SELECT OPCODE 4 FOR

PACKET

624

FiGs 6B

9 / 13

YES...

**25/3, AB, K/26 (Item 11 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.  
00739509**METHOD AND APPARATUS FOR MANAGING A NETWORK FLOW IN A HIGH PERFORMANCE  
NETWORK INTERFACE****PROCEDE ET APPAREIL DE GESTION D'UN FLUX RESEAU DANS UNE INTERFACE RESEAU  
HAUTE PERFORMANCE**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US,  
GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US,

Legal Representative:

VAUGHAN Daniel E (et al) (agent), Park & Vaughan LLP, Suite 310, 702  
Marshall Street, Redwood City, CA 94063, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052896 A2-A3 20000908 (WO 0052896)

Application: WO 2000US5244 20000229 (PCT/WO US0005244)

Priority Application: US 99259932 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 35541

English Abstract

A system and method are provided for managing a flow of packets through a network interface. A network flow is established for each datagram sent from a source entity to a destination entity. A flow key identifies the source and destination entities and is stored with information concerning

validity of the flow, data sequencing within the flow datagram and how recently the flow was active. When a packet within a network flow is received, an operation code is generated for identifying whether the packet is suitable for a particular network interface function. One operation code may indicate that a packet contains data to be re-assembled with other flow data. Another operation code may indicate that a packet is unsuitable for data re-assembly. Another operation code may specify that the packet is a control packet, has no data, or was received out of order.

Fulltext Availability: Claims  
Claim  
... 618  
YES  
NO TEAR DOWN FLOW;  
TO FOLLOW? SELECT OPCODE 3 FOR  
0 PACKET  
626  
UPDATE FLOW SEQUENCE  
NUMBER & ACTIVITY  
INDICATOR; SET FLOW  
VALIDITY INDICATOR  
622  
SELECT OPCODE 4 FOR  
PACKET  
624  
FIGn 6B  
9 / 16  
B...

**25/3,AB,K/27 (Item 12 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00739498

**METHOD AND APPARATUS FOR DYNAMIC PACKET BATCHING WITH A HIGH PERFORMANCE NETWORK INTERFACE**  
**PROCEDE ET APPAREIL DE MISE EN LOTS DYNAMIQUE DE PAQUETS AVEC UNE INTERFACE RESEAU HAUTE PERFORMANCE**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, Ca 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US  
GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US

Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 310, 702 Marshall Street,  
Redwood City, CA 94063, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052883 A2 20000908 (WO 0052883)  
Application: WO 2000US5344 20000229 (PCT/WO US0005344)

Priority Application: US 99260324 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK L  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Serial 09//693563

January 29, 2004

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 47104

## English Abstract

A system and method are provided for identifying related packets in a communication flow for the purpose of collectively processing them on a host computer. A packet received at a network interface is parsed to retrieve information from a protocol header. A flow key is generated to identify a communication flow that includes the packet, and is stored in a database of flow keys. When the packet is placed in a queue to be transferred to a host computer, the flow key and/or its index in the database is stored in a separated queue. A dynamic packet batching module searches for a packet in the same flow as the packet being transferred. If a related packet is located, the host computer is alerted and delays processing the transferred packet until the related packet is also received. By collectively processing the related packets, processor time is more efficiently utilized.

Fulltext Availability: Claims

Claim

... YES

ir

NO TEAR DOWN FLOW;

TO FOLLOW? SELECT OPCODE 3 FOR

620 PACKET

626

UPDATE FLOW SEQUENCE

NUMBER &amp; ACTIVITY

INDICATOR; SET FLOW

VALIDITY INDICATOR

622

SELECT OPCODE 4 FOR

PACKET

624

FIGm 6B

-WO 00/52883...

25/3,AB,K/29 (Item 14 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00739496

METHOD AND APPARATUS FOR DISTRIBUTING NETWORK TRAFFIC PROCESSING ON A  
MULTIPROCESSOR COMPUTERPROCEDE ET APPAREIL DE REPARTITION DU TRAITEMENT DU TRAFIC RESEAU AU NIVEAU  
D'UN ORDINATEUR A PROCESSEURS MULTIPLES

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, Sunnyvale, CA 94086, US

GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US

Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, 399 Sherman Avenue, Suite 5, Palo  
Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052881 A2 20000908 (WO 0052881)  
Application: WO 2000US5306 20000229 (PCT/WO US0005306)  
Priority Application: US 99259445 19990301  
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 33509

English Abstract

A system and method are provided for distributing the processing of network traffic received at a multiprocessor computer system. A packet is received from a network entity at a network interface circuit. A header portion of the packet is parsed to retrieve information stored in one or more protocol headers, such as source and destination identifiers or a virtual communication connection identifier. A source identifier and a destination identifier may be combined to form a flow key that is then subjected to a hash function. The modulus of the result of the hash function over the number of processors in the multiprocessor computer is then calculated. The result identifies a host processor to which the packet is submitted for processing. In another embodiment a modulus operation is performed on the packet's virtual communication connection identifier. The result of the modulus operation identifies the processor to service the packet.

Fulltext Availability: Claims

Claim

... 628

NO

OKAY?

NO TEAR DOWN FLOW;

TO FOLLOW? SELECT OPCODE 3 FOR

PACKET

626

UPDATE FLOW SEQUENCE

NUMBER & ACTIVITY

INDICATOR; SET FLOW

VALIDITY INDICATOR

622

SELECT OPCODE 4 FOR

PACKET

624

FIGm 6B

YES REPLACE FLOW...

25/3,AB,K/30 (Item 15 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00739494

METHOD AND APPARATUS FOR DATA RE-ASSEMBLY WITH A HIGH PERFORMANCE NETWORK INTERFACE

PROCEDE ET APPAREIL DE REUNION DE DONNEES DOTE D'UNE INTERFACE RESEAU HAUTE

**PERFORMANCE**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US  
GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US  
CHENG Linda, 1318 Burkette Drive, San Jose, CA 95129, US  
WATKINS John, 1469 Yukon Drive, Sunnyvale, CA 94087, US

Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 5, 399 Sherman Avenue, Palo  
Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052879 A2 20000908 (WO 0052879)  
Application: WO 2000US5245 20000229 (PCT/WO US0005245)  
Priority Application: US 99260333 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 67365

English Abstract

A system and method are provided for transferring a packet received from a network to a host computer. A flow key is generated to identify a communication flow that comprises the packet. A code is generated to indicate how the packet should be transferred to host memory. Based on the code, a transfer engine stores the packet in one or more host buffers. If the packet conforms to a predetermined protocol, its data is added to a re-assembly buffer with data from other packets in the same flow and its header portion is stored in a header buffer. Otherwise, the packet is stored in the header buffer if it is smaller than a predetermined threshold or, if larger than the threshold, it is stored in another buffer. After a packet is stored, the transfer engine configures a descriptor with information concerning the packet and releases the descriptor to the host.

Fulltext Availability: Claims

Claim

... YES  
IF  
NO TEAR DOWN FLOW;  
TO FOLLOW? SELECT OPCODE 3 FOR  
20 PACKET  
626  
UPDATE FLOW SEQUENCE  
NUMBER & ACTIVITY  
INDICATOR; SET FLOW  
VALIDITY INDICATOR  
622  
SELECT OPCODE 4 FOR  
PACKET

624  
FIGs 6B  
YES REPLACE FLOW...

25/3,AB,K/31 (Item 16 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00739485

**METHOD AND APPARATUS FOR CLASSIFYING NETWORK TRAFFIC IN A HIGH PERFORMANCE NETWORK INTERFACE**

**PROCEDE ET APPAREIL DE CLASSIFICATION DU TRAFIC RESEAU AU NIVEAU D'UNE INTERFACE RESEAU A HAUT RENDEMENT**

**Patent Applicant/Assignee:**

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

**Inventor(s):**

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US  
GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US  
WATKINS John, 1469 Yukon Drive, Sunnyvale, CA 94087, US  
CHENG Linda, 1318 Burkette Drive, San Jose, CA 95129, US

**Legal Representative:**

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 5, 399 Sherman Avenue, Palo Alto, CA 94306, US

**Patent and Priority Information (Country, Number, Date):**

Patent: WO 200052869 A2 20000908 (WO 0052869)  
Application: WO 2000US5307 20000229 (PCT/WO US0005307)  
Priority Application: US 99260618 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 30994

**English Abstract**

A network interface circuit includes a header parser for parsing a packet having a data portion and a header portion. If the packet conforms to a pre-selected protocol, the header portion of the packet is parsed to retrieve one or more values from individual protocol headers, such as an identifier of a source entity from which data in the data portion originated and an identifier of a destination entity. The identifiers are combined to form a key to identify communications between the source entity and the destination entity. Other information may also be retrieved from the header portion, including an indicator of the size of the data portion and a sequence number of the data within a larger collection of data. If the packet does not conform to the pre-selected communication protocols, a signal may be generated to alert other elements of the network interface circuit.

Fulltext Availability: Claims

Claim

... NO  
OKAY?

Serial 09//693563

January 29, 2004

18  
NO TEAR DOWN FLOW;  
TO FOLLOW? SELECT OPCODE 3 FOR  
PACKET  
626  
UPDATE FLOW SEQUENCE  
NUMBER & ACTIVITY  
INDICATOR; SET FLOW  
VALIDITY INDICATOR  
622  
SELECT OPCODE 4 FOR  
PACKET  
624  
FiGn 6B  
/13  
YES REPLACE...

**25/3,AB,K/37 (Item 22 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00332075

**METHOD AND SYSTEM FOR MAPPING AND TRACKING INFORMATION FROM A PLURALITY OF REMOTE STATIONS****PROCEDE ET SYSTEME DE MISE EN CORRESPONDANCE ET DE RECHERCHE D'INFORMATION A PARTIR DE PLUSIEURS STATIONS A DISTANCE**

Patent Applicant/Assignee:

MINTZ Yosef,

FENSTER Paul,

Inventor(s):

MINTZ Yosef,

FENSTER Paul,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9614586 A1 19960517

Application: WO 95US13232 19951018 (PCT/WO US9513232)

Priority Application: IL 111502 19941102; WO 95EP1330 19950410; IL 114219 19950619; IL 115579 19951011

Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 24358

English Abstract

A method of mapping (Figure 10) a characteristic value of a plurality of remote stations (18-24) each having a varying attribute affecting the characteristic value computed according to a predetermined procedure comprising: (a) assigning a plurality of transmission slots to each of the remote stations; (b) determining, by the respective stations, of their characteristic values; (c) initially broadcasting, by the respective stations, of their determined characteristic values in said plurality of transmission slots, said broadcast characteristic value having a first characteristic value resolution; and (d) subsequently broadcasting, by the stations, of their respective characteristic values in said plurality of transmission slots, said subsequent broadcasting having a finer characteristic value resolution relative to said previously broadcasted characteristic value having a first characteristic

value resolution.  
Fulltext Availability: Claims  
Claim  
... size of the resolution element is decreased when a remote - 73 I station broadcasts no **change** in characteristic value for a 2 predetermined **number** of **consecutive** broadcasts, 4 26, 7 method of tracking according to any of claims 16-25...

Serial 09//693563

January 29, 2004

File 350:Derwent WPIX 1963-2004/UD, UM &amp;UP=200406

File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)

Set	Items	Description
S1	146	CASH()CONTROL????
S2	121715	SAFE OR SAFES OR CASHBOX OR CASHBOXES OR CASH()REGISTER? ?
S3	1333902	SEQUEN? OR CONSECUTIV? OR SUCCESSIV? OR SUCCESSION? OR SUCCEEDING OR NEXT OR SUBSEQUENT?
S4	882054	FOLLOW???
S5	1501469	NUMBER?? OR NUMERICR?
S6	148821	IC=G06F-017/60 OR IC=G07G-001
S7	1297	CASH(5N)CONTROL????
S8	1654	S3()S4 OR S4(N)S5
S9	9	S2 AND S8
S10	0	S1 AND S8
S11	0	S7 AND S8
S12	16	S6 AND S8
S13	1	S9 AND S12 [not relevant]
S14	23	(S9 OR S12) NOT S13
S15	0	S1 AND S8
S16	2	S1 AND S2 AND S3
S17	2	S16 NOT S13:S14
S18	34	S7 AND S2 AND S3
S19	12	S6 AND S18
S20	11	S19 NOT (S13 OR S14 OR S16)
S21	23	S1 AND S6
S22	22	S21 NOT (S13:S14 OR S16 OR S19)

14/26, TI/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015572098

WPI Acc No: 2003-634255/200360

Manufacture data project management method - follow the manufacture request and the product to generate a project number and a corresponding project data folder

14/26, TI/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015384917

WPI Acc No: 2003-445860/20Q342

System for selling lottery ticket and method for selling total lottery ticket

14/26, TI/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015021135

WPI Acc No: 2003-081652/200308

Time sequential data prediction method for commercial/economic application, involves calculating transitional probability of following state based on stored states and correcting probability according to predicted state

14/26, TI/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014979345

WPI Acc No: 2003-039859/200303

**Attributable error identification method in financial processes of hospitals, involves performing nested analysis for variance of financial data values that are not normally distributed, to identify causes of variance**

**14/26, TI/6 (Item 6 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014527941

WPI Acc No: 2002-348644/200238

**Method for managing lottery number and system for providing lottery**

**14/26, TI/7 (Item 7 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013850353

WPI Acc No: 2001-334566/200135

**Electronic money transfer method for electronic commerce, includes using telephone cards to credit dialed desired amount in account associated with predetermined telephone number**

**14/7, K/13 (Item 13 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009362903

WPI Acc No: 1993-056381/199307

**Method for managing sales by shops in cash register - by checking recording of sale item, then on confirmation, checking issue of shop designed sale number , followed by checking whether commodity key is input**

**NoAbstract**

Patent Assignee: SAMSUNG ELECTRONICS CO (SMSU )

Inventor: JOH Y

**Number of Countries: 001 Number of Patents: 001**

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 9204437	B	19920605	KR 8913317	A	19890912	199307 B

Priority Applications (No Type Date): KR 8913317 A 19890912

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
KR 9204437	B		G06F-015/21	

Derwent Class: T01; T05

International Patent Class (Main): G06F-015/21

**14/7, K/16 (Item 1 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

07538817 \*\*Image available\*\*

METHOD AND DEVICE FOR GENERATING AND PRESENTING PROGRAM ASSOCIATED CONTENTS

PUB. NO.: 2003-032654 [JP 2003032654 A]

PUBLISHED: January 31, 2003 (20030131)

INVENTOR(s): HASHIMOTO TAKAKO

IIZAWA ATSUSHI

APPLICANT(s): JISEDAI JOHO HOSO SYSTEM KENKYUSHO KK

RICOH CO LTD

APPL. NO.: 2001-216039 [JP 20011216039]

Serial 09//693563

January 29, 2004

FILED: July 16, 2001 (20010716)

## ABSTRACT

PROBLEM TO BE SOLVED: To allow a user to passively view information personalized for each user without any complicate interaction, and to view his or her desired information in his or her desired order in a limited display region of a portable terminal.

SOLUTION: A program video and program associated information is inputted, and program associated contents are generated based on a preliminarily defined tree structure, and leaf nodes in the tree structure of the program associated contents are selected as presentation candidates for each user based on viewing data quantity preliminarily set as a viewing request by each user who has a portable terminal, and a presentation route **successively following** the leaf nodes being the presentation candidates by starting with the route of the tree structure is generated for each user as a presentation scenario, and the generated presentation scenario is transmitted to the portable terminal of the pertinent user.

COPYRIGHT: (C)2003, JPO

INTL CLASS: H04N-007/173; G06F-017/60 ; H04H-001/00; H04H-001/02;  
H04H-007/00

## 14/7,K/18 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

07483433 \*\*Image available\*\*

WORK INFORMATION COLLECTING SYSTEM AND WORK INFORMATION COLLECTING TERMINAL

PUB. NO.: 2002-351951 [JP 2002351951 A]

PUBLISHED: December 06, 2002 (20021206)

INVENTOR(s): HISAKAWA AKIRA

APPLICANT(s): HORIBA LTD

APPL. NO.: 2001-159827 [JP 20011159827]

FILED: May 29, 2001 (20010529)

## ABSTRACT

PROBLEM TO BE SOLVED: To provide a work information collecting system and a work information collecting terminal which can collect accurate work information without burdening a worker.

SOLUTION: This system is composed of a work information collecting terminal 1, which collects data about work item and work time as work information; and a computer 2, which executes a prescribed data processing according to the work information collected by this terminal 1. The terminal 1 has plural work keys 5 which are allocated by each work item of major division. On a display part 4, work items of minor division are displayed **sequentially following** the work items of major division. When an appropriate work item is inputted, work time of each work item is calculated, and data of the work item and work time is recorded in a memory card 3. The data in the memory card 3 is read into the computer 2, and data processing is executed and the result is outputted in the computer 2.

COPYRIGHT: (C)2003, JPO

INTL CLASS: G06F-017/60 ; G05B-019/418

## 14/7,K/21 (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

05155486 \*\*Image available\*\*

ACCOUNTING MACHINE WITH RECEIPT MANAGEMENT

PUB. NO.: 08-110986 [JP 8110986 A]

PUBLISHED: April 30, 1996 (19960430)

INVENTOR(s): KANO HIROMITSU  
TSURUMARU KOICHI

APPLICANT(s): SANYO ELECTRIC CO LTD [000188] (A Japanese Company or  
Corporation), JP (Japan)

APPL. NO.: 06-246289 [JP 94246289]

FILED: October 12, 1994 (19941012)  
ABSTRACT

PURPOSE: To exclude the receipts whose inspection is unnecessary in the inspection work of the sales summing-up processing and to improve the inspection efficiency by adding a **serial number**, which is never doubly issued on a receipt for recognition of the amount of money in the sales summing-up processing, in the issue work of an adjustment bill, an advance reception receipt, or the like and additionally printing a branch **number following** the **serial number** at the time of issuing the receipt again.

CONSTITUTION: The frequency of a branch **number** of the receipt summed and added by a receipt issue part 1112 is counted in an equipment-classified branch **number** storage part 1122, and it is accumulated for every equipment in a short-term equipment-classified branch **number** accumulation part 1124 at the time of check-in to the equipment and is cleared thereafter. Contents of the short-term equipment-classified branch **number** accumulation part 1124 are printed as the use condition of branch **numbers** together with the total of sales by a short-term sales summing-up processing part 1113, and the frequency in use is accumulated for every equipment in a long-term equipment-classified branch **number** accumulation part 1125 and is cleared thereafter. Branch **numbers** in the long-term equipment-classified branch **number** accumulation part 1125 are printed by a long-term sales summing-up processing part 1115 and are cleared thereafter

INTL CLASS: G07G-001/12 ; G07G-001/12

17/7,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012444085 \*\*Image available\*\*

WPI Acc No: 1999-250193/199921

**Electronic cash register - has CPU which compares invested amount of money and detected money under custody and when found to be equal, money is approved for next transaction**

Patent Assignee: TOKYO ELECTRIC CO LTD (TODK )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11073573	A	19990316	JP 97235261	A	19970829	199921 B

Priority Applications (No Type Date): JP 97235261 A 19970829

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11073573	A	12	G07G-001/12	

Abstract (Basic): JP 11073573 A

NOVELTY - A CPU (11) detects amount of currency kept under custody. Amount of invested money and detected money under custody are compared and when found to be equal the money is approved for **next transaction** by CPU, or else CPU disapproves. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: goods transaction procedure; memory medium for storing goods transaction procedure.

USE - For keeping account of every transaction.

ADVANTAGE - Ensures safety of **cash control** at cash handling terminal. DESCRIPTION OF DRAWING(S) - The figure shows block diagram of

electronic cash register . (11) CPU.

Dwg.1/8

Derwent Class: T05

International Patent Class (Main): G07G-001/12

**17/7,K/2 (Item 1 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

04752036 \*\*Image available\*\*

AUTOMATIC TRANSACTION DEVICE

PUB. NO.: 07-044636 [JP 7044636 A]

PUBLISHED: February 14, 1995 (19950214)

INVENTOR(s): MORIKAWA HISAO

APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 05-187983 [JP 93187983]

FILED: July 29, 1993 (19930729)

ABSTRACT

PURPOSE: To provide an automatic transaction device which is capable of improving fund efficiently by reducing cash amount to be set in an incorporated safe as much as possible.

CONSTITUTION: In automatic transaction devices 3A to 3C and 4 automatically performing money receiving and paying transactions, etc., by inputting information required for transactions by the operations of users and by performing on-line communications with a host computer 9 connected by an on-line via a communication line, proper cash amount to be stored in an incorporated safe , cash supplement time to the safe or cash collection time from the safe is calculated based on data of special days before and after consecutive holidays for the month or the year, weekdays, weather, etc., and cash data classified by time zones showing necessary cash amount every preliminarily set time zone, the calculated result is displayed on a display part as necessary, and the result is printed and outputted by a single slip printing part, by a cash controller 1 controlling cash operations.

**20/26, TI/1 (Item 1 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014317460

WPI Acc No: 2002-138162/200218

Display system for cash register network has guest processor linked to system which extracts data for display and can be controlled using one of the cash registers on the network

**20/26, TI/5 (Item 5 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

007942885

WPI Acc No: 1989-207997/198929

Control of electronic cash register printer - using print character counter to control generation of reset to index paper

**20/26, TI/10 (Item 3 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

00743363

INLINE INFORMATION PROCESSING SYSTEM

**20/7,K/3 (Item 3 from file: 350)**  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
009260818  
WPI Acc No: 1992-388231/199247  
Cash register mode control method - controlling mode change according to next mode flags, scanning key input to check code processing mode, storing code of corresp. mode, setting first flag to mask and setting second flag according to stored code NoAbstract  
Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU )  
Inventor: LEE H  
**Number of Countries: 001 Number of Patents: 001**  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
KR 9107768 B 19911002 KR 89104 A 19890107 199247 B  
Priority Applications (No Type Date): KR 89104 A 19890107  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
KR 9107768 B G07G-001/00  
Derwent Class: T05  
International Patent Class (Main): **G07G-001/00**

**20/7,K/4 (Item 4 from file: 350)**  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
007976484  
WPI Acc No: 1989-241596/198933  
Cash register with multi-window display - has controller for storing sales data into two storage areas and for transmitting data from second area to communication line  
Patent Assignee: MATSUSHITA ELEC IND CO LTD (MATU )  
Inventor: FUYAMA S; KODAMA M; MINATO T; MORI T; TAKAOKA Y  
**Number of Countries: 001 Number of Patents: 001**  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
US 4843547 A 19890627 US 86876199 A 19860619 198933 B  
Priority Applications (No Type Date): JP 85133263 A 19850619  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
US 4843547 A 10  
Abstract (Basic): US 4843547 A  
A first cash register operating in a registration mode is connected by a communication line to a second cash register operating in a calculation mode to serve customers forming a waiting line extending from the first cash register to the second. Sales data are registered by the first cash register, with the data of an earliest one of the customers being displayed on a first display unit and the sales data of all the customers being stored sequentially into respective second storage areas when a communications line is busy. When the line becomes available, the sales data are transmitted to the second cash register from the second storage areas sequentially.  
The second cash register stores the transmitted sales data into third and fourth storage areas in succession and provides a

simultaneous display of the sales data stored in the fourth storage areas on respective window areas of a second display unit. An adder sequentially calculates the sales data stored in the fourth storage areas in response to operation of a control key. Each cash register is operable independently in the registration and calculation modes.

ADVANTAGE - Permits sales persons to serve rush of orders  
Derwent Class: T05  
International Patent Class (Additional): G07G-001/12

20/7,K/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
007816354

WPI Acc No: 1989-081466/198911

Electronic cash register system with data communication control unit - assigns master station to each ECR sequentially in order registered in memory NoAbstract Dwg 0/4

Patent Assignee: SANYO ELECTRIC CO (SAOL) ; TOTTORI SANYO DENKI KK (TOTT)  
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 1034033	A	19890203	JP 87189916	A	19870729	198911 B

Priority Applications (No Type Date): JP 87189916 A 19870729

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 1034033	A	5		

Derwent Class: T01; T05; W01

International Patent Class (Additional): G06F-015/21; G07G-001/14 ;  
H04L-011/00

20/7,K/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
001438189

WPI Acc No: 1976-A1072X/197601

Data control system for cash register - with simplified data input and display has data storage unit and keyboard

Patent Assignee: CANON KK (CANO)

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2526864	A	19760102				197601 B
US 4075696	A	19780221				197810
DE 2526864	B	19810312				198112

Priority Applications (No Type Date): JP 7468881 A 19740617

Abstract (Basic): DE 2526864 A

The system has a data input unit (10, 11), a data storage unit (13a, 13b) and a data transfer unit (12) to take data from the storage unit when the input unit is not operating and to take data from the input unit when the latter is operated. The data input unit pref. has a keyboard (10). Pref. there are two storage units and a decision unit which determines from which storage unit the data should be taken. For use with e.g. a cash register, the system may have input registers for presetting and storage of classified articles, a memory for infrequently occurring articles, and accumulators with selectors and an

Serial 09//693563

January 29, 2004

instruction **sequence** circuit.  
Derwent Class: T01; T04; T05  
International Patent Class (Additional): G06F-003/00; G06F-015/22;  
**G07G-001/00**

**20/7,K/8 (Item 1 from file: 347)**

DIALOG(R) File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

05915767 \*\*Image available\*\*

COMMODITY SALE DATA PROCESSOR

PUB. NO.: 10-198867 [JP 10198867 A]

PUBLISHED: July 31, 1998 (19980731)

INVENTOR(s): SUGIURA JIRO

APPLICANT(s): TEC CORP [000356] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 09-001209 [JP 971209]

FILED: January 08, 1997 (19970108)

## ABSTRACT

PROBLEM TO BE SOLVED: To surely hand over a coupon to a client by reporting the issue of coupon so that an operator can recognize it before issuing the coupon when coupon issue conditions are satisfied.

SOLUTION: This device is provided with a CPU 11 as an issue report output control means formed from an electronic cash register 10, ROM 12 and buzzer alarm reporting means 30 as an issue reporting means and formed for reporting the issue of coupon so that the operator can recognize it before issuing the coupon when the coupon issue conditions are satisfied. Besides, as a coupon issue confirming means, an issue key 21 is provided for reinforcing the confirmation of operator and further as a next commodity registration inhibition control means, the CPU 11 and the ROM 12 are provided for reinforcing the duty of operator. Thus, since the issue of coupon is reported so as to be recognized by the operator, the operator can clearly recognize the issue of coupon to occur sometimes in the normal state of issuing no ticket.

INTL CLASS: **G07G-001/12 ; G07G-001/12 ; G07G-001/01****20/7,K/9 (Item 2 from file: 347)**

DIALOG(R) File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

04889966 \*\*Image available\*\*

**CASH REGISTER**

PUB. NO.: 07-182566 [JP 7182566 A]

PUBLISHED: July 21, 1995 (19950721)

INVENTOR(s): ONO KATSUYUKI

APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 05-327143 [JP 93327143]

FILED: December 24, 1993 (19931224)

## ABSTRACT

PURPOSE: To eliminate an error such as forgetting output and to prevent the generation of difference depending on an operator by correlating the output condition and the output kind of a report and selecting a report output processing.

CONSTITUTION: A cash register 3 controls a table preparation part 1, prepares a table relating with the output condition and the output kind of the report and successively stores it in a memory 2. The table stored in the memory 2 is utilized for report output processing executed by a circuit

Serial 09//693563

January 29, 2004

consisting of the collating part 5 and the report output part 6 of a report output processing selection part 4. Namely, when conditions at the time of outputting the report such as a condition which can be decided from information obtained within the **cash register** such as a date, a day, time, etc., is coincident with the condition stored in the memory 2, the combination of the reports to be outputted can be decided. Thereby, the operator does not have to think about a condition at the time of outputting the report and manually output plural kinds of the necessary reports.

INTL CLASS: G07G-001/12 ; G06F-017/60

## 20/7,K/11 (Item 4 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

00412946

## SETTING CONTROL SYSTEM FOR ELECTRONIC CASH REGISTER

PUB. NO.: 54-064946 [JP 54064946 A]

PUBLISHED: May 25, 1979 (19790525)

INVENTOR(s): MORISAWA SHIGENORI

OKAWA TAMOTSU

AOKI REIJIRO

APPLICANT(s): OMRON TATEISI ELECTRONICS CO [000294] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 52-132068 [JP 77132068]

FILED: November 01, 1977 (19771101)

## ABSTRACT

PURPOSE: To avoid the double setting when the product department code is set to the product department code area, by addressing the code area through the control unit to read out the data which is compared **consecutively** with the supplied codes and inhibiting setting of the corresponding code when a coincidence is secured for the comparison result.

CONSTITUTION: The electronic **cash register** memorizes the product register data given from keyboard 10 in ROM4 and RAM5 with every product department. To this RAM5, department area 501, transaction-based product register data area 502 and responsible person-based register data area 503 are provided. And when the product department code is set to area 501 through keyboard 10, the department code which is already set is read out via CPU3 to be compared with the department code supplied newly. Then the setting is inhibited for the department code supplied newly in case a coincidence is secured in the above comparison, thus, avoiding the double setting.

INTL CLASS: G06F-015/20; G07G-001/00

## 22/26,TI/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014519569

WPI Acc No: 2002-340272/200238

Centralized Cash Control Equipment (CCCE) port connecting apparatus for Electronic Gaming Device (EGD) which automatically chooses which system can communicate with the port

## 22/26,TI/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012444092

WPI Acc No: 1999-250200/199921

Serial 09//693563

January 29, 2004

**Sales data processor for POS - has change paying out machine which pays out cash corresponding to card data**

**22/26, TI/8 (Item 8 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

007714338

WPI Acc No: 1988-348270/198849

**Stock and cash control system e.g. for in-flight sales - has duty-free sales mode provided by depression of two alphabetic keys on key pad which is couple to integral display**

**22/3, AB, K/1 (Item 1 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015156288

WPI Acc No: 2003-216815/200321

XRPX Acc No: N03-173395

**Cash management system for POS system, compares identification information related to financial transactions, with prestored information, based on which delivery of cash to customer is determined**

Patent Assignee: NEC CORP (NIDE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2003044669	A	20030214	JP 2001226401	A	20010726	200321 B

Priority Applications (No Type Date): JP 2001226401 A 20010726

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2003044669	A	17	G06F-017/60	

Abstract (Basic): JP 2003044669 A

Abstract (Basic):

**NOVELTY - A CPU (3) compares identification information related to financial transactions, received from a terminal equipment (2) with prestored information. The delivery of cash to the customer is determined based on the comparison result.**

**DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:**

- (1) cash delivery method; and
- (2) cash control program.

**USE - For point-of-sales (POS) system. Also for internet banking.**

**ADVANTAGE - The cash is delivered efficiently and quickly, without communicating with the customer personally.**

**DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the cash management system. (Drawing includes non-English language text).**

terminal equipment (2)

CPU (3)

pp; 17 DwgNo 1/5

International Patent Class (Main): G06F-017/60

**22/3, AB, K/2 (Item 2 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015153217

WPI Acc No: 2003-213744/200321

XRPX Acc No: N03-170478

Serial 09//693563

January 29, 2004

**Capital cash control device releases cash after counting amount of money and after verifying authentication of operator**

Patent Assignee: OKI ELECTRIC IND CO LTD (OKID )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2002133514	A	20020510	JP 2000327983	A	20001027	200321 B

Priority Applications (No Type Date): JP 2000327983 A 20001027

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2002133514 A 4 G07F-019/00

Abstract (Basic): JP 2002133514 A

Abstract (Basic):

NOVELTY - The capital cash control device counts amount of money and releases the cash, after the cash release requesting operator receives personal authentication by the capital cash controller and after the confirmation of operator's authentication.

USE - Capital cash control device.

ADVANTAGE - The security is enhanced and number of persons of operators in the cash controller is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart illustrating the operation of the capital cash control device. (Drawing includes non-English language text).

pp; 4 DwgNo 1/1

International Patent Class (Additional): G06F-017/60 ...

22/3,AB,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013887205

WPI Acc No: 2001-371418/200139

XRPX Acc No: N01-271499

Cash control system in commercial store, has cash management information recording unit to record cash management information containing amount of each type of bill

Patent Assignee: KANDA CORP KK (AIKA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001109959	A	20010420	JP 99285647	A	19991006	200139 B

Priority Applications (No Type Date): JP 99285647 A 19991006

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2001109959 A 8 G07G-001/12

Abstract (Basic): JP 2001109959 A

Abstract (Basic):

NOVELTY - A cash management information recording unit records cash management information containing amount of each type of bill. Based on cash management information, a determining unit determines amount of specific bill used in operating store.

USE - For cash transactions in commercial stores.

ADVANTAGE - Since the collected money is separated according to the value of each note, change is always available at stores. Since amount of each note is stored, the transaction of money can be referred easily for each day.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of

**cash control system.** (Drawing includes non-English language text).  
pp; 8 DwgNo 1/5  
International Patent Class (Main): G07G-001/12  
International Patent Class (Additional): G06F-017/60 ...

**22/3,AB,K/5 (Item 5 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
012466245  
WPI Acc No: 1999-272353/199923  
XRPX Acc No: N99-203918

**Goods selling data processor e.g. cash management - has 10,0000 bill cash box common to two electronic cash registers, which cannot be released or removed until predetermined operation is performed, by inputting number of bills to 10,000 bill cash box**

Patent Assignee: TOKYO ELECTRIC CO LTD (TODK )

**Number of Countries: 001 Number of Patents: 001**

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11086136	A	19990330	JP 97242554	A	19970908	199923 B

Priority Applications (No Type Date): JP 97242554 A 19970908

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11086136	A	9	G07G-001/12	

Abstract (Basic): JP 11086136 A

NOVELTY - A 10,0000 bill cash box (50) common to two electronic cash registers (10a,10b), cannot be released or removed until a predetermined operation is performed, by inputting **number** of bills into each electronic cash register, to feed the **number** of bills into the 10,000 bill cash box. DETAILED DESCRIPTION - The data processor has two electronic cash registers (10a,10b) with respective drawers (30) for storing cash.

USE - For e.g. cash management, cash collection control.

ADVANTAGE - Ensures safety in **cash control** since 10,000 bill cash box needs predetermined operation to be released. Reduces size and cost of cash drawer. Simplifies structure of drawer. Increases work efficiency of processor. Ensures safe and correct cash collection.

Increases service efficiency. DESCRIPTION OF DRAWING(S) - The figure shows the side sectional view of a goods selling data processor.

(10a,10b) Electronic cash registers; (30) Drawers; (50) 10,0000 bill cash box.

Dwg.2/7

International Patent Class (Main): G07G-001/12

**22/3,AB,K/7 (Item 7 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.  
008859890  
WPI Acc No: 1991-363914/199150  
XRPX Acc No: N91-278746

**Cash control and replenishment of automatic teller machine - has currency storage unit and replenishing storage unit for refilling first unit w.r.t. data stored in memory**

Patent Assignee: TOSHIBA KK (TOKE )

Inventor: SANO M

**Number of Countries: 002 Number of Patents: 005**

Patent Family:

Patent No	Kind	Date	Applicant No	Kind	Date	Week
GB 2244838	A	19911211	GB 9111795	A	19910531	199150 B
JP 8320966	A	19961203	JP 90139579	A	19900531	199707
			JP 96167179	A	19900531	
JP 8320967	A	19961203	JP 90139579	A	19900531	199707
			JP 96167180	A	19900531	
JP 10074279	A	19980317	JP 90139579	A	19900531	199821
			JP 97201475	A	19900531	
JP 3204928	B2	20010904	JP 90139579	A	19900531	200152
			JP 97201475	A	19900531	

Priority Applications (No Type Date): JP 90139579 A 19900531; JP 96167179 A 19900531; JP 96167180 A 19900531; JP 97201475 A 19900531

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8320966	A	16		G07F-019/00	Div ex application JP 90139579
JP 8320967	A	16		G07F-019/00	Div ex application JP 90139579
JP 10074279	A	18		G07D-009/00	Div ex application JP 90139579
JP 3204928	B2	18		G07D-009/00	Div ex application JP 90139579 Previous Publ. patent JP 10074279

Abstract (Basic): GB 2244838 A

Each teller machine is provided with currency storing units (604, 605) for storing different value paper currencies and a replenishing currency storing unit (606). The teller machine controller receives currency data relating to the amount of the paper currencies stored in the currency storing units and stores the data in a memory. The teller machine controller automatically decides whether the currency storing units should be automatically replenished from the replenishing storing unit based on the currency data.

The condition of each storing unit can be displayed on a panel of the controller, and card accessed by a service operator, the operator then performing auxiliary manual currency recovery and replenishment if necessary. Currency deposited by a user into an inlet (25) passes to validatory unit (608), and if valid along apath (610c) to an appropriate unit. If the deposited currency is invalid or abnormal it is returned to the outlet (25) via a wheel (613). If a user wishes to withdraw currency it is removed one note at a time from the appropriate storing unit and passed to the outlet after collection in stack form (P).

ADVANTAGE - Increased currency use efficiency and enhances service for clients.

Dwg. 6/15

International Patent Class (Additional): G06F-017/60 ...

22/3,AB,K/9 (Item 1 from file: 347)

DIALOG(R) File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

07474292

SYSTEM FOR MANAGING AUTOMATIC TELLER MACHINE INTEGRALLY

PUB. NO.: 2002-342810 [JP 2002342810 A]

PUBLISHED: November 29, 2002 (20021129)

INVENTOR(s): MATSUOKA MITSUGI

APPLICANT(s): NEC CORP

APPL. NO.: 2001-142366 [JP 20011142366]

FILED: May 11, 2001 (20010511)

ABSTRACT

PROBLEM TO BE SOLVED: To eliminate a human mistake.

SOLUTION: This management system is provided with a communication network 50, a safe 10, a cash charger 20, a **cash controller** 30, and an automatic teller machine 40. The safe 10 holds proper information proper thereto. The cash charger 20 reads the proper information of the safe 10 to generate cash information as to a cash to be charged to the safe 10, charges the cash into the safe 10, and transmits the proper information and the cash information via the communication network 50. The **cash controller** 30 controls the cash information corresponding to the proper information, in response to reception of the proper information and the cash information. The automatic teller machine 40 sets the filled safe 10, reads the proper information of the set safe 10, and receives and controls the cash information from the **cash controller** 30 via the communication network 50, based on the proper information.

COPYRIGHT: (C)2003,JPO

INTL CLASS: G07D-009/00; G06F-017/60

COPYRIGHT: (C)2003,JPO

**22/3,AB,K/10 (Item 2 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

07429386

PASSIVE OPERATION SUPPORTING METHOD

PUB. NO.: 2002-297896 [JP 2002297896 A]

PUBLISHED: October 11, 2002 (20021011)

INVENTOR(s): AZEYANAGI RINTARO

YAMASHITA YASUHISA

APPLICANT(s): CHUO MITSUI TRUST & BANKING CO LTD

APPL. NO.: 2001-098699 [JP 20011098699]

FILED: March 30, 2001 (20010330)

ABSTRACT

PROBLEM TO BE SOLVED: To realize a portfolio construction method in a passive fund with a trade cost taken into account, and also realize an efficient cash management method.

SOLUTION: The tracking error of passive fund =  $[S\{\text{return rate of fund} - \text{return rate of bench mark}\}]^2/0.5$  indicating the deviation of the passive fund from the bench mark can be expressed by a tracking error due to a deviation from the bench mark + trade cost. An optimization calculation program 18 calculates a portfolio holding ratio so as to minimize the tracking error. Also, the **cash control** program realizes an efficient **cash control** by utilizing futures.

COPYRIGHT: (C)2002,JPO

INTL CLASS: G06F-017/60 ; G06F-017/18

COPYRIGHT: (C)2002,JPO

**22/3,AB,K/11 (Item 3 from file: 347)**

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

07428976

SERVER AND METHOD FOR PROVIDING INFORMATION

PUB. NO.: 2002-297486 [JP 2002297486 A]

PUBLISHED: October 11, 2002 (20021011)

INVENTOR(s): AKIYAMA KAZUYA

ISHIDA MASAYOSHI

APPLICANT(s): SANYO ELECTRIC CO LTD

APPL. NO.: 2001-097167 [JP 20011097167]

FILED: March 29, 2001 (20010329)

ABSTRACT

PROBLEM TO BE SOLVED: To shorten the time that elapses before a Web page is displayed.

SOLUTION: An information providing server 100 pre-acquires addresses of contents desired to be acquired from a user through a registration receipt part 140. A cash control part 160 accesses for acquiring contents to addresses received at the receipt part 140 and stores the contents into a cash data storage part 170. The control part 160 acquires the contents in a predetermined time interval with repetition to keep in the latest situation. When a user requests the contents, an information presenting part 150 reads out the contents from the storage part 170 to present to a user. The user can acquire desired contents from the server 100 without the need for accessing to a server stored the contents.

COPYRIGHT: (C)2002, JPO

INTL CLASS: G06F-013/00; G06F-012/00; G06F-017/60 ; H04M-011/08

**22/3,AB,K/13 (Item 5 from file: 347)**

DIALOG(R) File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

05151076

COUNTER FUND CONTROL SYSTEM

PUB. NO.: 08-106576 [JP 8106576 A]

PUBLISHED: April 23, 1996 (19960423)

INVENTOR(s): MURAYAMA FUMIYAKI

APPLICANT(s): GLORY LTD [420874] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 06-244194 [JP 94244194]

FILED: October 07, 1994 (19941007)

ABSTRACT

PURPOSE: To provide a counter fund control system which is capable of performing the efficient cash control within a shop by performing the immediate control of the sales and the status monitoring of deficient and excessive operation fund and properly performing a sales prediction and supplement/ collection.

CONSTITUTION: This system has plural registers 1 installed on counters, cash processors 2 and 3 which are connected with these registers and receive and deliver sales prices, a control computer 20 which is connected with the registers by a communication means and controlling the cash information for plural registers and a display part which is connected with this control computer and displaying the quantity and amount of cash within plural controlled registers. The system is provided with a control terminal equipment 30 controlling/monitoring information by controlling the quantity and amount within each register in real time and displaying the immediate control of sales prices and excessive operation fund on the display part

INTL CLASS: G07G-001/12 ; G07G-001/12 ; G06F-017/60

**22/3,AB/14 (Item 6 from file: 347)**

DIALOG(R) File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

04128863

AUTOMATIC CASH DISPENSER

PUB. NO.: 05-120563 [JP 5120563 A]

PUBLISHED: May 18, 1993 (19930518)

INVENTOR(s): SAITO SATORU

APPLICANT(s): OMRON CORP [000294] (A Japanese Company or Corporation), JP (Japan)

Serial 09//693563

January 29, 2004

APPL. NO.: 03-282991 [JP 91282991]  
FILED: October 29, 1991 (19911029)  
JOURNAL: Section: P, Section No. 1607, Vol. 17, No. 491, Pg. 36,  
September 06, 1993 (19930906)

## ABSTRACT

PURPOSE: To automate settlement processing and accurately perform **cash control** by displaying settlement wait data on the display means of the automatic cash dispenser and performing the settlement processing of the settlement wait data when the ID code of a storage medium is read out and matches the ID code of the settlement wait data which is selected and inputted on the display means.

CONSTITUTION: When the ID code in the settlement wait data which is selected and inputted on the display 11 matches the ID code of the ID card shown in a card insertion slot 12 by an operator, the settlement processing is automatically performed according to the amount of money fed in feed slots 13a and 13b and the charge amount of money of the settlement wait data. Thus, the sale control and settlement processing of a POS system are automated to specify operators, settlement by settlement, cash processing is performed just sufficiently, and an illegal act by an employee can securely be prevented

22/3,AB/15 (Item 7 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

03210997

## POS TERMINAL EQUIPMENT

PUB. NO.: 02-186497 [JP 2186497 A]  
PUBLISHED: July 20, 1990 (19900720)  
INVENTOR(s): MUTO JUN  
APPLICANT(s): KOUFU NIPPON DENKI KK [000000] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 01-004817 [JP 894817]  
FILED: January 13, 1989 (19890113)  
JOURNAL: Section: P, Section No. 1115, Vol. 14, No. 468, Pg. 89,  
October 12, 1990 (19901012)

## ABSTRACT

PURPOSE: To prevent the service life of a CRT from being lowered by burning by providing a sensor to detect the existence of an operator in the surface side of a console and a control part to execute the adjustment of CRT luminance according to the signal of the sensor in a POS terminal equipment to execute commodity control and **cash control** at the time of selling.

CONSTITUTION: A POS terminal equipment 1 is composed of a CRT 2, sensor 3 and console 1a in a front surface side. When the operator exists in the front surface side of the console 1a, such a condition is detected by the sensor and a signal to show the existence of the operator is sent from a controller, which is not shown in a figure, provided in the equipment 1. Then, the luminance of the CRT 2 is held constant. Next, when the operator is separated from the console 1a, such a condition is detected by the sensor 3 and similarly, the signal to show the absence of the operator is outputted from the controller. Then, the luminance of the CRT 2 is lowered to the prescribed luminance. Thus, the luminance is increased or decreased according to the presence and absence of the operator in front of the console 1a. Then, the CRT is prevented from being burned and energy consumption is reduced

22/3,AB/16 (Item 8 from file: 347)

Serial 09//693563

January 29, 2004

DIALOG(R) File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

03175499

## COMMODITY SALES DATA PROCESSOR

PUB. NO.: 02-150999 [JP 2150999 A]

PUBLISHED: June 11, 1990 (19900611)

INVENTOR(s): TSUJII TAKAO

APPLICANT(s): TOKYO ELECTRIC CO LTD [000356] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 63-304846 [JP 88304846]

FILED: December 01, 1988 (19881201)

JOURNAL: Section: P, Section No. 1098, Vol. 14, No. 400, Pg. 4, August 29, 1990 (19900829)

## ABSTRACT

PURPOSE: To surely attain an intra-drawer **cash control** for each cashier and a balance carried forward control to next accounting business by cumulatively totalling errors generated in the accounting business according to the cashier to the error totaling area in a cumulative totalling table.

CONSTITUTION: A balance transfer key is provided at a keyboard 38, the balance carried forward area is provided in the cashier control table in a RAM, when the practically total amount of cash in a drawer 44 is inputted by the operation of the balance transfer key, it is stored into the balance carried forward area. Further according to a sign-off operation, data in the balance carried forward area are held in a corresponding initial loan area and a residual amount area as the balance carried forward. Further, error areas and the error totaling tables are respectively provided in the cashier control table and the cumulative totaling table, the difference of the actual and logical cash total amounts in the drawer 44 is calculated, stored into the corresponding error area, and the contents of the error area are added to the corresponding error totaling area according to the sign-off operation

**22/3,AB/17 (Item 9 from file: 347)**

DIALOG(R) File 347:JAPIO

(c) 2004 JPO &amp; JAPIO. All rts. reserv.

01269772

## ELECTRONIC REGISTER

PUB. NO.: 58-207172 [JP 58207172 A]

PUBLISHED: December 02, 1983 (19831202)

INVENTOR(s): TAKATSUDO HIROAKI

HARUHARA KAZUYOSHI

APPLICANT(s): CASIO COMPUT CO LTD [350750] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 57-089771 [JP 8289771]

FILED: May 28, 1982 (19820528)

JOURNAL: Section: P, Section No. 261, Vol. 08, No. 58, Pg. 126, March 16, 1984 (19840316)

## ABSTRACT

PURPOSE: To perform the **cash control** with drawers arranged for each transaction with a registering process for each type of product or each transaction, by providing plural drawers to an electronic register and at the same time opening these drawers after reading out each drawer **number** data.

CONSTITUTION: The storing case of an electronic register contains 4 drawers 1a-1d to store the cash and 4 drawers 1A-1D to store moneys other than cash

such as credit slips, checks, etc. Responsible persons A and E are assinged to drawers 1a and 1A, and other responsible persons are assigned to other drawers respectively. These responsible persons are stored in a responsible person memory 9b. When a customer is registered, the amount of moneys is processed with a transaction memory 9a corresponding to transaction keys as well as the memory 9b corresponding to responsible person keys. Then the drawer **number** data is read out to a drawer buffer A in response to the transaction and the responsible person, and the decoded result of the drawer **number** data is set to the buffer A. As a result, one of drawers 1a-1D is opened to carry out a registering process

**22/3,AB/18 (Item 10 from file: 347)**

DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.  
01143364

UNLOCKING CONTROLLER OF CASH DRAWER

PUB. NO.: 58-080764 [JP 58080764 A]  
PUBLISHED: May 14, 1983 (19830514)  
INVENTOR(s): MIYAMOTO KUNIHIRA  
APPLICANT(s): SHARP CORP [000504] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 56-180116 [JP 81180116]  
FILED: November 09, 1981 (19811109)  
JOURNAL: Section: P, Section No. 214, Vol. 07, No. 176, Pg. 140,  
August 04, 1983 (19830804)

ABSTRACT

PURPOSE: To ensure the strict **cash control** for an electronic cash register having plural cash drawers which are provided relatively, by avoiding such mistake that  $\geq 2$  cash drawers are unclocked at one time due to a program mistake or the external noises.

CONSTITUTION: When a master CPU11 gives an unlocking command to a certain cash drawer, a code obtained by combining the logic states of at least 2 bits is used. A controller 12 decodes the code and gives a driving command to the driving circuits 15a-15d which drive either one of the cash drawers based on the above-mentioned code. Thus such mistake that  $\geq 2$  cash drawers are unlocked at one time can be avoided even though the signal showing an unlocking command is added to  $\geq 2$  bits due to a program mistake of the CPU11 or the external noises

**22/3,AB/19 (Item 11 from file: 347)**

DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.  
01143363

ELECTRONIC CASH REGISTER

PUB. NO.: 58-080763 [JP 58080763 A]  
PUBLISHED: May 14, 1983 (19830514)  
INVENTOR(s): NUNOYAMA SEIJI  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company  
or Corporation), JP (Japan)  
APPL. NO.: 56-178860 [JP 81178860]  
FILED: November 06, 1981 (19811106)  
JOURNAL: Section: P, Section No. 214, Vol. 07, No. 176, Pg. 139,  
August 04, 1983 (19830804)

ABSTRACT

PURPOSE: To ensure the effective use of an electronic cash register, by selecting and printing only the value that is particularly important for

the **cash control** among the data fed by the ten-key or in the contents of results of calculations.

CONSTITUTION: A ten-key 1 feeds the single unit amount of each article. An arithmetic circuit 6 delivers a positive mark to the amount of a function key 2 which is a factor of the receipt of money and then a negative mark to the amount of the key 2 which is a factor of the payment respectively. The gate circuits 7 and 11 are opened to the data on the single unit amount of the negative mark and closed for the data on the single unit amount of the positive mark respectively. The output of the circuit 6 is printed at a printing part 10 via the circuits 7 and 11

22/3,AB/20 (Item 12 from file: 347)

DIALOG(R) File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

00951669

DRAWER CONTROL SYSTEM IN EACH TIME ZONE OF ELECTRONIC REGISTER

PUB. NO.: 57-101969 [JP 57101969 A]

PUBLISHED: June 24, 1982 (19820624)

INVENTOR(s): KUMAGAI SHO

APPLICANT(s): CASIO COMPUT CO LTD [350750] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 55-179177 [JP 80179177]

FILED: December 17, 1980 (19801217)

JOURNAL: Section: P, Section No. 145, Vol. 06, No. 192, Pg. 67,  
September 30, 1982 (19820930)

#### ABSTRACT

PURPOSE: To strictly execute a **cash control** in each time zone, by storing and counting up sales data in each time zone, releasing a drawer corresponding to each time zone when registration has ended, and comparing data counted up in each time zone with cash in the drawer, which is used in only its time zone.

CONSTITUTION: To a CPU5 of ECR, a clock circuit 6 for counting a present time, an RAM7 for storing a sales data in each time zone, and a responsible person's switch 8 are connected through an address bus AB and a data bus DB. Also, to the CPU5, a drawer opening control part and plural drawer parts 9 consisting of a buzzer, etc. are connected. When executing the registration processing of the ECR of this constitution, in which time zone the present time exists is detected by the CPU5, a drawer corresponding to its time zone of a drawer part 9 is released by its detection output, and a data stored and counted up in each time zone in the RAM7 is compared with cash in its drawer by the CPU5, by which cash in each time zone is controlled strictly

File 348: EUROPEAN PATENTS 1978-2004/Jan W04  
File 349: PCT FULLTEXT 1979-2002/UB=20040122, UT=20040115

Set	Items	Description
S1	34	CASH() CONTROL????
S2	79751	SAFE OR SAFES OR CASHBOX OR CASHBOXES OR CASH() REGISTER? ?
S3	887084	SEQUEN? OR CONSECUTIV? OR SUCCESSIV? OR SUCCESSION? OR SUCCEEDING OR NEXT OR SUBSEQUENT?
S4	1058924	FOLLOW???
S5	889186	NUMBER?? OR NUMERICR?
S6	701	CASH(5N) CONTROL????
S7	21405	IC=G06F-017/60 OR IC=G07G-001
S8	182686	SEQUENT?????
S9	16420	(S3 OR S8) () S5 OR S4(N) S5
S10	517	S7 AND S9
<b>S11</b>	<b>5</b>	<b>S2(S) S9 AND S7</b>
S12	202	S6 AND S7
S13	3	S9(S) S6 AND S7
<b>S14</b>	<b>3</b>	<b>S13 NOT S11</b>
S15	0	S1(S) S2(S) S9
<b>S16</b>	<b>1</b>	<b>S6(S) S2(S) S9</b>
S17	1377	S2 AND S7
S18	132	S9 AND S17
<b>S19</b>	<b>1</b>	<b>S2/TI AND S18</b>

**11/3, AB, K/1 (Item 1 from file: 348)**

DIALOG(R) File 348: EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.  
01409644

**CUSTOMER MANAGEMENT SYSTEM**

**KUNDENVERWALTUNGSSYSTEM**

**SYSTEME DE GESTION DE LA CLIENTELE**

PATENT ASSIGNEE:

Toshiba Tec Kabushiki Kaisha, (1860484), 1-1, Kanda Nishiki-cho,  
Chiyoda-ku, Tokyo 101-8442, (JP), (Applicant designated States: all)  
INVENTOR:

MATSUSHITA, Naohiro, 7-11, Kamo, Mishima-shi, Shizuoka 411-0023, (JP)

LEGAL REPRESENTATIVE:

Fuchs Mehler Weiss & Fritzsche (100495), Patentanwalte Sohnleinstrasse 8,  
65201 Wiesbaden, (DE)

PATENT (CC, No, Kind, Date): EP 1302918 A1 030416 (Basic)  
WO 2002009053 020131

APPLICATION (CC, No, Date): EP 2001950027 010718; WO 2001JP6251 010718

PRIORITY (CC, No, Date): JP 2000220842 000721.

DESIGNATED STATES: DE; ES; FR; GB; PT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G07G-001/00 ; G07G-001/12

ABSTRACT EP 1302918 A1

When a shopping container (13) put on a counter (12) is moved on this counter, a bar code scanner (14) reads a bar code from bar code holding means (15) mounted on the shopping container and outputs it to a cash register.

ABSTRACT WORD COUNT: 43

NOTE: Figure **number** on first page: 5

LANGUAGE (Publication, Procedural, Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

Serial 09//693563

January 29, 2004

CLAIMS A (English)	200316	808
SPEC A (English)	200316	4251
Total word count - document A		5059
Total word count - document B		0
Total word count - documents A + B		5059

...SPECIFICATION 44 in the data base 18. In accordance with a sales **number** which is a **consecutive number** to be issued each time registration and settlement are performed through the **cash register** 11, the sales file 41 **sequentially** stores the relevant customer identification **number**, date, time and...

...sales amount (total amount of money). In accordance with a details **number**, which is a **consecutive number** to be issued each time goods is registered, the details file 42 **sequentially** stores a...

**11/3,AB,K/3 (Item 2 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00905254

**AN INFORMATION MANAGEMENT SYSTEM  
SYSTEME DE GESTION DE L'INFORMATION**

## Patent Applicant/Assignee:

ORCHESTRIA LIMITED, 190 The Strand, London WC2R 1JN, GB, GB (Residence),  
GB (Nationality), (For all designated states except: US)

## Patent Applicant/Inventor:

MALCOLM Peter Bryan, Wortham, Lewdown, Okehampton, Devon EX20 4QJ, GB, GB  
(Residence), GB (Nationality), (Designated only for: US)

NAPIER John Anthony, Little Stamborough, Roadwater, Watchet, Somerset  
TA23 ORW, GB, GB (Residence), GB (Nationality), (Designated only for:  
US)

STICKLER Andrew Mark, Parsonage Farmhouse, Netherclay, Bishop's Hall,  
Taunton, Somerset TA1 5EE, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

TAMBLIN Nathan John, 5 Oakfield Park, Wellington, Somerset TA21 8EX, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

BEADLE Paul James Owen, Waterside House, Uplowman, Tiverton, Devon EX16  
7DW, GB, GB (Residence), GB (Nationality), (Designated only for: US)

CROCKER Jason Paul, 4 Harvey Way, Ashill, Ilminster, Somerset TA19 9QD,  
GB, GB (Residence), GB (Nationality), (Designated only for: US)

## Legal Representative:

ABNETT Richard Charles (agent), Reddie & Grose, 16 Theobalds Road, London  
WC1X 8PL, GB,

Patent and Priority Information (Country, **Number**, Date):

Patent: WO 200239331 A2 20020516 (WO 0239331)

Application: WO 2001GB4979 20011108 (PCT/WO GB0104979)

Priority Application: GB 200027280 20001108; US 2001923704 20010807

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 70047

Main International Patent Class: G06F-017/60

Fulltext Availability: Claims

Claim

... the transmission to a third party for approval, renegotiate a higher level of encryption to safe -guard the transmission if the credit card number belongs to the company, or prevent the...Thus any strings of digits in this range may be identified as possible credit card numbers .

Following the extraction step S162 control passes to decision step S164 where.a routine end of...

11/3,AB/4 (Item 3 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00777022

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR AN E-COMMERCE BASED ARCHITECTURE**

**SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION POUR UNE ARCHITECTURE BASEE SUR LE COMMERCE ELECTRONIQUE**

Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JG 'S Gravenhage, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L (et al) (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109794 A2-A3 20010208 (WO 0109794)

Application: WO 2000US20704 20000728 (PCT/WO US0020704)

Priority Application: US 99364734 19990730

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 122424

English Abstract

A system, method and article of manufacture provide a resources e-commerce technical architecture where context objects are shared among a plurality of components executed on a transaction server. Services are also accessed within the server without a need for knowledge of an application program interface of the server. Application consistency is maintained by referencing text phrases through a short codes framework. Additionally, a graphical user interface is also generated for the resources e-commerce technical architecture.

...International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

11/3,AB,K/5 (Item 4 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.  
00338679

**AUTOMATIC PORTABLE ACCOUNT CONTROLLER FOR REMOTELY ARRANGING FOR PAYMENT OF DEBT TO A VENDOR**  
**GESTIONNAIRE AUTOMATIQUE DE COMPTES PERMETTANT D'EFFECTUER A DISTANCE LE PAIEMENT D'UNE DETTE A UN VENDEUR**

Patent Applicant/Assignee:

BERNSTEIN Robert Jay,

Inventor(s):

BERNSTEIN Robert Jay,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9621191 A1 19960711

Application: WO 95US16655 19951221 (PCT/WO US9516655)

Priority Application: US 95369749 19950106

Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN KE LS MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 6731

English Abstract

An automatic account controller (110) for remotely arranging for payment of debt to a vendor. The controller includes a detector for activating the portable account controller upon detection of indicia of identity of an authorized user and an interactive display (102) for selecting a mode of payment to the vendor. The controller further includes a keyboard (104) for entering a payment amount, a transceiver (112), transcoder (114), and modem (116) for communicating with the vendor, and for executing the selected mode of payment to the vendor through the transceiver (112), transcoder (114), and modem (116) for communicating.

Main International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

Detailed Description

... 10 contains, embedded within, a **serial number** of the issuing bank as well as a **sequence number** uniquely identifying the portable purchasing device 10. The vendor's **cashbox** 50 first checks by reference to memory 56 whether the issuing bank is in good...

...vendor then checks that the portable purchasing device is an appropriate model compatible with the **cashbox** 50 and that the payment amount is of a proper value...

14/6/2 (Item 2 from file: 349)  
00806382

**METHOD FOR AFFORDING A MARKET SPACE INTERFACE BETWEEN A PLURALITY OF MANUFACTURERS AND SERVICE PROVIDERS AND INSTALLATION MANAGEMENT VIA A MARKET SPACE INTERFACE**

14/3,AB,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00806384

**NETWORK AND LIFE CYCLE ASSET MANAGEMENT IN AN E-COMMERCE ENVIRONMENT AND METHOD THEREOF**  
**GESTION D'ACTIFS DURANT LE CYCLE DE VIE ET EN RESEAU DANS UN ENVIRONNEMENT DE COMMERCE ELECTRONIQUE ET PROCEDE ASSOCIE**

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US  
(Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US,  
Legal Representative:

HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th Floor,  
2029 Century Park East, Los Angeles, CA 90067-3024, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200139030 A2 20010531 (WO 0139030)

Application: WO 2000US32324 20001122 (PCT/WO US0032324)

Priority Application: US 99444775 19991122; US 99447621 19991122

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK

DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR

TT UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 171499

Main International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

Detailed Description

... Management component in this illustrative embodiment of the present invention may include: faster order to **cash**, duplication reduction, simplified processes, and manufacturing capacity utilization. 5

Turning now to the Network Asset...s networks is a change in data flow. Data flow in today's network typically **follows** the client-server computing model. This is where many clients are all transferring data into...to the destination address field, a **number** of subfields such as operation code, source address, **sequence number**, and length code.

44 The trailer is typically a technique for generating redundancy checks, such...as defined in the 2 5 32/64-word call record format described above.

V) **Sequence Number** (3 bits) : This field represents the **number** of calls which have occurred on the same...

...**number** with the same Timepoint 1 (second) value. The first telephone call will have a **sequence number** set to '0.' This value increases incrementally for each **successive** call which originates on the...

...I is stored in the Timepoint I field of the 32-word call record; the **Sequence Number** is stored in the NCID **Sequence Number** field of the 32-word call record. The 32-word call record also includes an...when an NCID must be created. In step 4202, the current switch will calculate a **sequence number**. The **sequence number** represents the **number** of calls which have occurred on the same port **number** with the same Timepoint I value. The first call has a **sequence number** value of '0,' after which the **sequence number** will increase incrementally for each **successive** call that originates on the same port **number** with the same Timepoint I value.

After creating the **sequence number** in step 4202, the current switch proceeds to step 4204. In step 4204, the current...bits 0-7 byte I 1, bits 0-7

byte 12, bits 0-2 NCID **Sequence Number**

byte 12, bits 3-7 Not Used

Table 44A

After transporting the call 3602 and...

...bits 0-7 byte I 1, bits 0-7 byte 12, bits 0-2 NCID	Sequence	Number
95 byte 12, bits 3-7 Not Used		

Table 44B

After transporting the call 3602...the destination address field, a number of subfields such as 122 operation code, source address, sequence number, and length code. The trailer is typically a technique for generating redundancy checks, such as...

**14/3,AB,K/3 (Item 3 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00490977

**MULTI-PROCESSING FINANCIAL TRANSACTION PROCESSING SYSTEM**

**SYSTEME MULTIPROCESSEUR DE TRAITEMENT DE TRANSACTIONS FINANCIERES**

Patent Applicant/Assignee:

N-GINE LLC,

Inventor(s):

HINKLE William H,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9922329 A1 19990506

Application: WO 98US23026 19981029 (PCT/WO US9823026)

Priority Application: US 9763714 19971029

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ  
VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH  
CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW  
ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 30245

English Abstract

A financial transaction processing system in which much of the transaction processing logic is stored in a database, resulting in a relatively small executable file. Each transaction is described by a transaction data descriptor that includes a series of subtransaction data descriptions of actions that can be performed independently of one another, permitting parallel processing on multiprocessor computers. Additionally, control columns in certain tables allow balance checking, thereby providing an indication of the integrity of the current data. Moreover, any changes to financial data can be traced for any period of time into the past, allowing full auditability.

Main International Patent Class: G06F-017/60

Fulltext Availability: Detailed Description

Detailed Description

... Licensee Default Definitions

Primary Data consisting of

Licensee Identifier

Default Class

Demand or Overdraft

Accounting Control Number

Accounting Control Number Description

Cash Record Pointer in EA Table

Other Details

Audit Fields consisting of Processing Model I

Serial 09//693563

January 29, 2004

S Add Date  
Add **Sequence Number**  
Add User Identifier  
Change Date  
Change **Sequence Number**  
Change User Identifier  
Delete Date  
Delete **Sequence Number**  
Delete User Identifier  
**Number of Modifications**  
Archive Status  
Archive Date  
Example.  
Licensee Class Sub-Class...Disbursement Switch  
Performance Measurement Switch  
Licensee Wholesaler  
Licensee Reseller  
Account Settlement Switch  
Other Details  
+  
System **Control** Data consisting of  
Income **Cash**  
Principal Cash  
Invested Income  
Invested Principal  
Total Units - Assets  
Liabilities  
Total Units - Liabilities  
Capital Gain...Cap Adj In - Cost Basis  
Audit Fields consisting of Processing Model I  
Add Date  
Add **Sequence Number**  
Add User Identifier  
Change Date  
Change **Sequence Number**  
Change User Identifier  
Delete Date  
Delete **Sequence Number**  
Delete User Identifier  
**Number of Modifications**  
Archive Status  
Archive Date  
(&Cj Account Communication Links  
Primary...  
...23026  
88  
Other Details  
Audit Fields consisting of Processing Model I  
Add Date  
5 Add **Sequence Number**  
Add User Identifier  
Change Date  
Change **Sequence Number**  
Change User Identifier  
Delete Date  
Delete **Sequence Number**

Delete User Identifier  
**Number** of Modifications  
Archiye Status  
Is Archive Date  
Example.  
Licensee Account Communications...

**16/3,AB/1 (Item 1 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.  
00344642

**SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION**

**SYSTEMES ET PROCEDES DE GESTION SECURISEE DE TRANSACTIONS ET DE PROTECTION ELECTRONIQUE DES DROITS**

Patent Applicant/Assignee:  
ELECTRONIC PUBLISHING RESOURCES INC,

Inventor(s):

GINTER Karl L,  
SHEAR Victor H,  
SPAHN Francis J,  
VAN WIE David M,

Patent and Priority Information (Country, **Number**, Date):

Patent: WO 9627155 A2 19960906

Application: WO 96US2303 19960213 (PCT/WO US9602303)

Priority Application: US 95388107 19950213

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AZ BY KG KZ RU TJ TM AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 207972

English Abstract

The present invention provides systems and methods for electronic commerce including secure transaction management and electronic rights protection. Electronic appliances such as computers employed in accordance with the present invention help to ensure that information is accessed and used only in authorized ways, and maintain the integrity, availability, and/or confidentiality of the information. Secure subsystems used with such electronic appliances provide a distributed virtual distribution environment (VDE) that may enforce a secure chain of handling and control, for example, to control and/or meter or otherwise monitor use of electronically stored or disseminated information. Such a virtual distribution environment may be used to protect rights of various participants in electronic commerce and other electronic or electronic-facilitated transactions. Secure distributed and other operating system environments and architectures, employing, for example, secure semiconductor processing arrangements that may establish secure, protected environments at each node. These techniques may be used to support an end-to-end electronic information distribution capability that may be used, for example, utilizing the "electronic highway".

Fulltext Availability: Detailed Description

**19/3,AB,K/1 (Item 1 from file: 349)**

DIALOG(R) File 349:PCT FULLTEXT

Serial 09//693563

January 29, 2004

(c) 2004 WIPO/Univentio. All rts. reserv.

00928428

SAFE IDENTIFICATION SYSTEM IN BANKING, FINANCIAL AND ELECTRONIC  
INFORMATION SYSTEMS  
SYSTEME D'IDENTIFICATION SECURISE POUR SYSTEMES D'OPERATIONS BANCAIRES ET  
FINANCIERES ET D'INFORMATIONS ELECTRONIQUES

Patent Applicant/Inventor:

GOLFETTO Clovis, Rua 2, Casa 3, Acampamento Tamboril, Vila Planalto,  
CEP-70800-000 Brasilia, DF, BR, BR (Residence), BR (Nationality)

Legal Representative:

CARVALHO Ricardo (agent), Rua Paraiba, 1352, Conj. 711, Bairro  
Funcionarios, CEP-30130-140 Belo Horizonte, MG, BR,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200261640 A1 20020808 (WO 0261640)

Application: WO 2002BR2 20020109 (PCT/WO BR0200002)

Priority Application: BR 81120 U 20010129 (BR U)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3930

English Abstract

The present model of utility increases security and confidence for the user's identification in data processing, banking, financial and electronic commerce systems, internet, sales through telephone, credit and debt cards, magnetic cards through the utilization of an access name/**number** and variable password, with a single validity and which are defined based on rules pre established by the client. The access name/**numbers** and password are not stored in a database, but calculated by the client, at the moment its use is deemed necessary. Therefore, if such data are discovered by others. With the user's **safe** identification, special use passwords can be created, for example, in a situation of holdups or "flash kidnappings".

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Detailed Description

The present patent refers to an...

...methods of concealment and camouflage are used by system managers in order to guarantee the **safe** guard of the information. Likewise, the client has the obligation to memorize and keep an...besides enabling him to change these formulas whenever he likes.

Since this system allows a **safe** identification of the user, passwords can be created for special occasions such as "flash kidnappings...  
...can do his shopping, always entering the **number** and the password. To increase security, the **sequential number** of the operation can be added, since in the present system there are three extra...which all the passwords are variable (change at each access), besides being quick, simple and **safe**.

The dynamic position password allows the increase of security in

electronic systems of authorization and...  
...methods of concealment and camouflage are used by system managers in  
order to guarantee the **safe** guard of the information. Likewise, the  
client has the obligation to memorize and keep an...point of view, the  
necessary security is the one that allows the client to feel **safe**, is  
simple, fast and as easy as possible, requiring from the client, less  
effort to...

Claim

1@ A **safe** identification system in banking , financial and electronic  
information systems, characterized by the use of changing...

DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01195622 98-45017

**Totem: A fault-tolerant multicast group communication system**

Moser, L E; Agarwal, D A; Melliar-Smith P M; Budhia, R K;

Lingley-Papadopoulos, C A

Communications of the ACM v39n4 PP: 54-63 Apr 1996 ISSN: 0001-0782

JRNL CODE: ACM

DOC TYPE: Journal article LANGUAGE: English LENGTH: 10 Pages

SPECIAL FEATURE: Charts Graphs References

WORD COUNT: 5827

**ABSTRACT:** The Totem system, developed at the University of California, Santa Barbara, provides reliable, totally ordered multicasting of messages over local area networks and exploits the hardware broadcasts of such networks to achieve high performance. Total ordering of messages simplifies the programming of fault-tolerant distributed applications. If distributed operations are derived from the same messages in the same total order, consistency of replicated information is easier to maintain. Simplified programming results in fewer programming errors and increased reliability for the application. Totem is intended for complex applications in which both fault tolerance and real-time performance are critical. Such complex applications are typically built as asynchronous event-driven distributed systems. The types of applications that can benefit from Totem include: 1. air traffic control, 2. industrial automation, 3. transaction processing and 4. banking.

**TEXT:** Headnote: Delivering multicast messages, Totem invokes operations in the same total order throughout the distributed system. The result: consistency of replicated data and simplified programming of applications.

Many applications can benefit from distributed systems based on multiple computers interconnected by a communication network. Distributed systems use inexpensive high-performance computers and can be configured closely to the application. Information can be replicated on several processors to improve performance and to provide fault tolerance. However, programming distributed applications is difficult, particularly when replicated information must remain consistent as it is updated in the presence of faults. Since many messages may be required, recovery from faults may introduce delays, making real-time performance objectives difficult to achieve.

Ordered multicast group communication systems are a useful infrastructure on which complex distributed applications can be built. Isis [4], Horus [18], Trans/Total [12, 15], Transis [6], Amoeba [8], and Delta-4 [17] are examples of such systems. The Totem system, developed at the University of California, Santa Barbara, provides reliable, totally ordered multicasting of messages over local-area networks (LANs) and exploits the hardware broadcasts of such networks to achieve high performance (see the sidebar "Why Totem?"). Total ordering of messages simplifies the programming of fault-tolerant distributed applications. If distributed operations are derived from the same messages in the same total order, consistency of replicated information is easier to maintain. Simplified programming results in fewer programming errors and increased reliability for the application.

Totem is intended for complex applications in which both fault tolerance and real-time performance are critical. Such complex applications are typically built as asynchronous event-driven distributed systems. The types of applications that can benefit from Totem's totally ordered message delivery service include many systems most important to our society, such as air traffic control, industrial automation, transaction processing, banking, stock market trading, intelligent highways, medical monitoring, and replicated database systems.

The characteristics that make Totem suitable for complex applications, particularly soft real-time applications, include:

High throughput and low predictable latency;

Rapid detection of, and recovery from, faults;

Systemwide total ordering of messages, even for systems in which the network can partition and remerge, and for systems in which process groups can intersect; and

Scalability to larger systems based on multiple LANs, interconnected by gateways, within the same geographical area.

With Totem, correctness of message ordering and configuration changes are ensured, even in the presence of multiple faults, and excellent performance is achieved.

#### Totem Services

The Totem system provides reliable totally ordered multicasting of messages to processes within process groups over a single LAN or over multiple LANs interconnected by gateways. Totem provides this delivery service in the presence of various types of communication and processor faults, including message loss, network partitioning, and processor crash, as well as omission and timing faults, but not completely arbitrary faults.

(Chart Omitted)

The structure of the Totem system as a hierarchy of protocols is shown in Figure 1. With reference to this hierarchy, we say that a message is received from the next lower layer of the hierarchy and is delivered to the next higher layer. When messages are received, they may not be in the correct order and, thus, may need to be reordered before being delivered to the next higher layer.

The bottom layer of the Totem system hierarchy is a best-effort multicast service, which typically uses the user datagram protocol (UDP) to exploit the high-performance hardware broadcasts of LANs. The single-ring protocol converts the best-effort multicasts into the service of reliable totally ordered delivery of messages on a single LAN while providing fault detection, recovery, and configuration-change services. The multiple-ring protocol uses the single-ring protocol and provides global total ordering of messages, as well as network topology maintenance services. The multiple-ring protocol, using information from the process group interface above it, forwards messages through the gateways to the LANs on which they are required. The process group interface delivers messages to the application processes in the appropriate process groups and provides process group membership services. The Totem system can also operate with

the process group interface directly on top of the single-ring protocol.

The Totem system provides two reliable totally ordered message delivery services, as requested by the originator of the message, called agreed and safe:

Agreed delivery guarantees that, when a processor delivers a message, it has already delivered all prior messages originated by processors in its current configuration and timestamped within the duration of that configuration.

Safe delivery further guarantees that before a processor delivers a message, it has determined that every other processor in its current configuration has received the message. Safe delivery is useful, for example, in transaction processing systems where a transaction must be committed by all of the processors or none of them.

Both of these services deliver messages in a single systemwide total order (linear sequence) that respects Lamport's causal order [10]. A processor may not need to deliver all of the messages, and, in the presence of faults, it may not be able to deliver all of them. When a processor fails or the network partitions, it may be impossible to determine which messages were delivered in which order by the processor before it failed, or whether messages were delivered by processors in other components of the partitioned network. Delivery of messages in a consistent systemwide total order is not easy when faults can occur.

(Table Omitted)

Extended virtual synchrony [14] ensures that the agreed- and safe-delivery guarantees are honored within every configuration, even if faulty processors are repaired or if a partitioned network remerges (see the sidebar, "Virtual Synchrony and Extended Virtual Synchrony"). When a fault occurs, a transitional configuration with a reduced membership is introduced, all members of which can honor the delivery guarantees. If the network partitions, processors in different components of the partitioned network may deliver different messages, but they never deliver the same messages in different orders. For many applications, this is a very important property.

Consider, for example, a commercial enterprise in which purchases received over the Internet before the close of business in New York are handled by the New York office and afterward by the San Francisco office. If the system were to partition at the critical moment (without extended virtual synchrony), it is possible that in New York the close of business message is ordered before the purchase message, while in San Francisco it is ordered after the purchase message. Both offices would then regard the other office as responsible for the purchase.

Interestingly, extended virtual synchrony can be guaranteed only if messages are born-ordered, meaning that the relative order of any two messages is determined directly from the messages, as broadcast by their sources. The Totem system uses bornordered messages, but some other multicast group communication systems do not.

The Totem single-ring protocol [1, 3, 13] provides reliable totally ordered delivery of messages using a logical token-passing ring superimposed on a LAN, such as an Ethernet. The token circulates around the ring as a point-to-point message, with a token retransmission mechanism to guard against token loss. Only the processor holding the token can broadcast a message. The token, shown in Figure 2, provides total ordering of messages, rapid detection of faults, and effective flow control.

#### Message Ordering

In the Totem single-ring protocol, a sequence number field in the token, called seq, provides a single sequence of message sequence numbers for all messages broadcast on the ring, and thus a total order on messages. When a processor broadcasts a new message, it increments the seq field of the token and gives the message that sequence number. Other processors recognize missing messages by detecting gaps in the sequence of message sequence numbers, and request retransmissions by inserting the sequence numbers of the missing messages into the retransmission request list of the token. If a processor has received a message and all of its predecessors, as indicated by the message sequence numbers, it can deliver the message as an agreed message.

The all-received-up-to field, or aru, of the token enables a processor to determine, after a full token rotation, a sequence number so that all processors on the ring have received all messages with lower sequence numbers. A processor can deliver a message as a safe message if the sequence number of the message is less than or equal to this sequence number. When a processor delivers a message as safe, it can reclaim the buffer space used by the message because it will never need to retransmit the message.

One might think that the continuously circulating token would result in increased overhead and reduced performance. The performance of other ordered multicast protocols is limited by input buffer overflow under high loads, causing message loss and retransmission. In Totem, the token provides accurate information on the number of messages transmitted during the previous token rotation. Using this information, Totem's flow-control mechanism limits transmissions to ensure that input buffers seldom overflow, allowing Totem to operate at higher throughput than other protocols.

(Chart Omitted)

The token also provides information about the aggregate message backlog of the processors on the ring, allowing a fairer allocation of bandwidth to processors than simpler schemes, such as the fiber distributed data interface (FDDI). The Totem flow control mechanism provides excellent protection against fluctuations in processor loading but is vulnerable to competition for the input buffers from unanticipated network traffic on the LAN. Under high loads, Totem incurs relatively little variation in the latency to message delivery, an important factor for real-time applications.

#### Local Configuration Services

The Totem single-ring ordering protocol is integrated with a membership protocol that provides a membership or configuration service for a single LAN, including addition of new and recovered processors and deletion of faulty processors. Faulty processors are detected by timeouts. New or restarted processors are detected by the appearance of messages on the LAN

from processors that are not members of the current ring. Like Transis [6], Totem handles network partitioning and remerging of components of a partitioned network.

The Totem single-ring membership protocol ensures:

Consensus. Every member of a configuration agrees on the membership of that configuration.

Termination. Every processor installs some configuration with an agreed membership within a bounded time unless it fails within that time.

Subject to these consensus and termination requirements, the membership protocol aims to form as large a membership as possible.

The well-known Fischer, Lynch, and Paterson impossibility result [7] demonstrates that, in a completely asynchronous system, it is impossible for processors to reach consensus in the presence of even a single crash failure. Chandra and Toueg [5] have shown, however, that consensus is possible in an asynchronous system subject to faults-if an unreliable failure detector is provided. We employ this strategy. Totem's failure detector uses timeouts and may exclude a slow processor from the membership, even though it has not actually failed.

The Totem single-ring membership protocol achieves consensus in bounded time, even if further faults occur, by reducing the membership until consensus is reached and by using timeouts that bound the time spent in any state of the membership protocol. The protocol can terminate in a singleton membership; however, with an appropriate choice of timeouts and with judicious use of randomization, the probability of a singleton membership is very small.

(Chart Omitted)

(Chart Omitted)

After reaching consensus on the membership, the membership protocol constructs a new ring on which the ordering protocol can resume operation, generates a new token, and recovers messages not yet received when the fault occurred. To install a new regular configuration, the protocol delivers two Configuration Change messages, rather than the one message that might have been expected. The first Configuration Change message introduces a transitional configuration of reduced size that excludes the faulty or inaccessible processors. Delivery of this message indicates that the agreed and safe delivery guarantees now apply only to the smaller transitional configuration. Within the transitional configuration, the remaining messages of the old configuration are delivered. After these messages are delivered, the second Configuration Change message is delivered, introducing the new regular configuration.

#### The Totem Multiple-Ring Protocol

The Totem multiple-ring protocol [1, 2, 13] operates over multiple LANs interconnected by gateways. Imposed on each LAN is a logical token-passing ring on which the single-ring protocol operates. The multiple-ring protocol provides essentially the same services-with the same properties-as the single-ring protocol. In particular, the message-ordering service provides agreed and safe delivery, and the topology maintenance service provides

consensus and termination for changes in the topology.

#### Message Ordering

To achieve a global total order of messages over all rings, the Totem multiple-ring protocol uses Lamport timestamps and delivers messages in timestamp order. Messages with the same timestamp are delivered in the order of their source ring identifiers. Delivery of messages in timestamp order guarantees global consistency of message ordering. However, before a processor can deliver a message in timestamp order, it must know it will never subsequently receive a message with a lower timestamp.

Messages are generated with increasing timestamps and sequence numbers on each individual ring. The gateways forward messages in sequence number order from one ring to the next, as shown in Figure 3. When a gateway broadcasts a forwarded message, it gives the message a new sequence number for the next ring so the message can be reliably delivered on that ring. The timestamp of the message, however, remains unchanged. The single-ring sequence numbers (which contain no gaps), together with forwarding of messages in sequence number order, ensure that there are no missing messages.

For each ring from which it might receive a message, a processor maintains a `recv_msgs` list of messages originated on that ring and received from the single-ring protocol, as shown in Figure 4. A processor can deliver a message as an agreed message, and remove it from the `recv_msgs` list, if the message has the lowest timestamp of all messages in the `recv_msgs` lists and if none of the `recv_msgs` lists is empty. Because messages from the same source ring are forwarded in the order of their sequence numbers—also the order of their timestamps—a processor then knows it will never receive a message with a lower timestamp from that ring.

The gateways periodically broadcast messages, called Guarantee Vector messages, for the rings to which they are attached. The Guarantee Vector messages ensure that a processor can continue to deliver messages as agreed messages, even if, for some ring, no processor on that ring has recently originated a message. The Guarantee Vector messages also report which messages have been received on a ring from each of the other rings and, thus, allow a processor to determine which messages can be delivered as safe messages.

#### Network Topology Maintenance

In the Totem multiple-ring protocol, each gateway maintains a data structure, called topology, listing the rings within its connected component and the gateways that interconnect them. The topology of the network may be completely arbitrary. Since the gateways have knowledge of the network topology, they can adapt the message routing strategy to the current topology. A processor that is not a gateway needs to know only the rings from which it can expect to receive messages, rather than the full topology of the network.

If messages are originated on a ring of which a processor is unaware, it will not wait for such messages and may prematurely deliver other messages with higher timestamps. Similarly, if a ring becomes inaccessible and the processor is not informed, it will wait for a message from that ring, and message ordering will stop.

Processor faults and network partitioning are detected by the single-ring protocol, which generates a Configuration Change message to report the change in the local ring. Each gateway on the ring analyzes the Configuration Change message to determine its effect on the topology. The multiple-ring protocol then generates and broadcasts a Topology Change message reflecting the change. In particular, if a gateway finds that a ring has become inaccessible, the gateway removes the ring from its topology and notifies the other processors and gateways using a Topology Change message. This removal of the ring ends the need to wait for messages from that ring and allows messages from other rings to be ordered. Similarly, a Configuration Change message and its consequent Topology Change message can report if a ring is being added to the topology.

A topology change must have the same effect for each of the processors and gateways that were previously able to, and can still, communicate with each other. Although the processors and gateways may learn of a topology change at different physical times, they must still agree on a common logical time for the topology change and also on the set of messages delivered before the topology change. To accomplish this, Configuration Change and Topology Change messages are timestamped and delivered in timestamp order along with the regular messages.

#### The Totem Process Group Interface

An application running on top of Totem (and also on top of other group communication systems) is structured as a collection of process groups. Each process group is a set of processes cooperating to perform a particular task of the application. A process can be a member of several intersecting process groups, and a process group can span several rings, as shown in Figure 5. Each message is addressed to one or more process groups and is delivered to the processes that are members of those process groups. The Totem process group interface [11] provides the services of sending and receiving messages addressed to process groups and of creating, joining, and leaving process groups. For each application process, the interface establishes a socket through which the process communicates with Totem and through which the process can poll to determine whether messages are pending.

(Chart Omitted)

As the process group interface passes messages from the application processes down to the multiplexing protocol, it fragments large messages and combines small messages into larger messages (packets) of a convenient size for transmission. On receiving messages from the multiple-ring protocol, the process group interface reassembles the messages and enqueues them on the sockets of the processes that are members of the groups to which the messages are addressed. Because the process group interface receives messages in the correct order, it need not be concerned with message ordering.

On each processor, the process group interface maintains the current membership of any process group of which at least one process on that processor is a member. When a process joins or leaves a group, this fact is disseminated throughout the network to all members of the group by the process group membership protocol.

Maintaining the consistency of message ordering when a process can be a

member of several intersecting process groups, or when a process communicates with other processes outside its group, is an interesting problem. Ordering messages independently within each process group can lead to inconsistencies. Consider three processes, p, q, and r, all of which are members of two process groups, G and H. Process p multicasts message  $m_{sub 1}$  to group G. On receiving  $m_{sub 1}$ , q multicasts message  $m_{sub 2}$  to group H. Clearly,  $m_{sub 1}$  causally precedes  $m_{sub 2}$  but, if messages are ordered only within groups,  $m_{sub 2}$  might be delivered to process r before  $m_{sub 1}$ . The only effective method known to us for ensuring consistency in the presence of multiple intersecting process groups is to impose a single global total order on all messages for all process groups in the system—the strategy adopted by Totem.

#### Performance

The Totem system has been implemented in the C programming language on Sun Microsystems IPCs running SunOS 4.1 and on Sun SPARCstation 20s running Solaris 2.4 over 10-Mbit/s and 100-Mbit/s Ethernet. It uses the Ethernet hardware broadcast capabilities and standard Unix facilities, particularly Unix UDP sockets, to broadcast messages and to transfer the token. The implementation has been ported to several other types of machines.

#### Single Ring

We have measured the throughput (number of messages an individual processor delivers into the total order per second) of the Totem single-ring protocol on our network of eight Sun SPARCstation 20s running Solaris 2.4 over a 100-Mbit/s Ethernet. Each processor was ready to broadcast at all times and the extra load on the processors and on the Ethernet was minimal. The flow-control parameters were adjusted to maximize throughput.

(Graph Omitted)

As Figure 6 shows, the highest throughput results from packing small messages into larger messages (packets) within the application process. For small messages, the primary determinant of throughput is the cost of packing, rather than the cost of transmission and ordering. For the highest throughput, the processors are saturated and no cycles are left for the application. Real-world applications must operate with substantially fewer messages per second than are shown in Figure 6.

Detection of a processor crash requires at most 50 milliseconds, and recovery after detection typically requires less than 20 milliseconds for this eightprocessor network. Further faults during recovery may lengthen this time, but it remains bounded.

For real-time applications, the latency from origination to delivery of a message is also important. To investigate the tail of the latency distribution, we developed an analytic model [16]. The graph at the left of Figure 7 shows the probability density function for the latency to agreed delivery with approximately 1,000 Poisson arrivals per second on a ring of eight processors with 1,000-byte messages. The graph at the right of Figure 7 shows the corresponding probability density function for a deterministic arrival process. For a modern LAN, under normal conditions and with good flow control, the probability of message loss is very small, typically less than  $r = 0.00001$ .

As is evident, for low message-loss rates, the deterministic arrival

process has a lower probability of incurring a longer latency to agreed delivery than the Poisson arrival process. The Poisson arrival process allows messages to bunch together, slowing the token rotation and resulting in higher latencies for all messages in the bunch. If the nature of the system is such that the generation of messages tends to be Poisson rather than deterministic, it is necessary to operate at lower message generation rates to avoid high latencies.

We are currently extending the probability density function analysis to include processor faults and multiple rings. These probability density functions provide the predictability needed for real-time applications (see the sidebar, "What Is Real Time?").

#### Multiple Rings

In general, token-based protocols scale poorly to large systems, but Totem can operate on multiple rings with a filtering mechanism at each gateway. Messages addressed to a process group are forwarded along one (or more) spanning trees, but only if needed to reach members of the process group. Thus, Totem exploits process-group locality and scales logarithmically, rather than linearly, to larger networks.

(Graph Omitted)

(Graph Omitted)

(Chart Omitted)

To investigate the performance of the multiplering protocol with more processors than we currently have in our laboratory, we developed an analytic model. For the four topologies shown in Figure 8, each containing 40 processors, we considered the probability that a message must be forwarded through the network. In this analysis,  $P_{sub 1}$  represents the probability that a message originated in one half of the network must be forwarded to the other half;  $P_{sub 2}$  represents the probability that, within one half of the network, a message must be forwarded from one quarter to the other.

The graphs in Figure 9 show the mean latencies to agreed and safe delivery for various traffic levels (total number of messages generated in the network per second) and for each of the four topologies with  $P_{sub 1} = 0.1$  and  $P_{sub 2} = 0.2$ . With these low probabilities, process-group locality is good, and relatively few messages must be forwarded through the gateways. The multiple-ring topologies show substantially lower latencies than a single ring with the same number of processors at the same traffic level and are capable of sustaining substantially higher traffic levels with reasonable latencies. Even when  $P_{sub 1} = 1.0$  and  $P_{sub 2} = 1.0$ , the multiple-ring topologies exhibit improved performance over a single ring, particularly for safe messages.

#### Conclusions

The Totem system enables fault-tolerant applications in distributed systems to maintain the consistency of replicated information by providing reliable totally ordered multicasting of messages. A hierarchy of protocols delivers messages to processes within process groups over a single LAN or over multiple LANs interconnected by gateways. The message ordering strategy of Totem employs timestamps to define a consistent total order on messages systemwide and sequence numbers to ensure reliable delivery of messages.

Hardware broadcasts, multiple rings, filtering of messages, and process group locality enable Totem to achieve high throughput and low predictable latency.

#### Acknowledgments

We wish to thank Yair Amir, Thomas Archambault, Wesley Chun, Paul Ciarfella, Erling Fledsberg, BeiJing Guo, Michael King, Priya Narasimhan, Vandana Rao, Michael Santos, and Efstratios Thomopoulos for their contributions to development of the Totem system. We also wish to thank David Powell for inviting us to write this article, as well as the other authors of the articles in this special section for their comments.

This work was supported by the National Science Foundation, Grant No. NCR-9016361, and by the Advanced Research Project Agency, Contract No. N00174-93-K-0097.

The Totem system homepage is at <http://www.betta.ece.ucsb.edu/totem.html>.

#### Sidebar: Virtual Synchrony and Extended Virtual Synchrony

In group communication systems, the delivery and subsequent processing of multicast messages can alter related or replicated data items, maintained by several processes. If the messages are received in different orders by different group members, the data at those processes might become inconsistent. Moreover, if processes fail, or if they leave or join the process groups dynamically, different processes can have different views of the process group membership, which again might result in inconsistent data.

The virtual synchrony model [41, introduced for Isis, orders group membership changes along with the regular messages. It ensures that failures do not result in incomplete delivery of multicast messages or holes in the causal delivery order. It also ensures that, if two processes proceed together from one view of the group membership to the next, they deliver the same messages in the first view. Virtual synchrony does not constrain the behavior of faulty or isolated processes. Faulty processes if they recover, are regarded as new processes. In a primary partition strategy, such as that of Isis, if the system partitions, one component of the partition (the primary component) continues to operate. Processes in other components continue to operate. Processes in other components are deemed faulty.

Processors and processes do, however, recover after failure with stable storage intact, and networks do remerge after partitioning. In different components of a partitioned network, processes can operate concurrently without being able to communicate with each other. Thus, the message delivery guarantees provided by a process can refer only to its local component, which suffices for messages delivered only in that component. However, while the network is becoming partitioned or while a process fails, some messages might be delivered in more than one component of the network.

The extended virtual synchrony model [141, introduced for Totem, extends the model of virtual synchrony to systems in which processes can fail and recover and in which the network can partition and remerge. Even in such systems, the message delivery guarantees are strictly honored. The same messages may be delivered in two or more components of a partitioned

network, but the message ordering is consistent in all of them. Moreover, some processes may not have received a message, and so the other processes are told which processes are known to have received it. Extended virtual synchrony does not solve all the problems of recovery in a fault-tolerant distributed system, but it does avoid inconsistencies that make recovery unnecessarily difficult.

#### What Is Real Time?

Traditionally, the design of real-time systems has been dominated by the synchronous hard real-time paradigm, which is appropriate for embedded real-time systems [9]. All operations in the system are performed according to a preplanned schedule based on the worst-case workload and worst-case processor performance. The classical hard realtime paradigm aims to provide absolute guarantees that every real-time deadline will be met.

In the real world, however, there are no absolute guarantees; there is a probability, small but non-zero, that all of the processors in the system will fail. The best we can do is to determine the probability that a deadline will be missed and ensure that the probability is small enough. For civilian airline flight control, a probability of 10<sup>-16</sup> of missing a deadline is small enough, based on an acceptable failure rate of 10<sup>-10</sup> per hour and 106 deadlines per hour. Other applications allow higher rates of missing deadlines.

Complex real-time systems contain many sources of variability. There are variations in processor performance resulting from caches, cycle stealing, and interrupt handling; there are variations in the execution of programs caused by special cases and by heuristic algorithms; there are variations resulting from fault recovery and there are variations resulting from fault recovery; and there are variations in the workload. A preplanned worst-case design for a complex real-time system is necessarily a conservative design with adverse effects on performance. Such systems are, therefore, seldom built as preplanned synchronous systems. Instead, they are built as event-driven asynchronous soft real-time systems that provide a high probability, rather than an absolute guarantee, that real-time deadlines will be met.

Both hard and soft real-time paradigms are necessarily probabilistic. For soft real-time systems, we estimate the probability that the system will generate the required results before the deadlines. For hard real-time systems, we estimate the probability that the system will generate the intended results. These probabilities are not easily calculated; more research is required in this area.

In simple real-time systems, only one or a few operations are pending at any time, and processing and communication latencies are important factors in ensuring that real-time deadlines are met. In complex real-time systems, many operations may be pending, and the time these operations spend in queues is an important factor in determining whether real-time deadlines are met. The lengths of the queues and the time the operations spend in them are determined by the throughput.

Consequently, complex real-time systems are better served by mechanisms designed for high throughput and predictable latency, rather than by mechanisms that try to achieve the lowest possible latency at the price of decreased throughput.

Footnote: The Lamport timestamp of a message is obtained from a local Lamport clock. If a processor receives a message whose timestamp exceeds the value of its clock, the processor advances its clock to a value greater than the timestamp.

Permission to make digital/hard copy of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage, the copyright notice, the title of the publication and its date appear, and notice is given that copying is by permission of AC, Inc. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or a fee.

Reference: References

1. Agarwal, D.A. Totem: A reliable ordered delivery protocol for interconnected local-area networks. Ph.D. dissertation. Department of Electrical and Computer Engineering. University of California, Santa Barbara (Aug. 1994). 2. Agarwal, D.A., Moser, L.E., Melliar-Smith, P.M., and Budhia, R.K. A reliable ordered delivery protocol for interconnected local-area networks. In Proceedings of the International Conference on Network Protocols (Tokyo, Japan) Nov. 1995, pp. 365-374. 3. Amir, Y., Moser, L.E., Melliar-Smith, P.M., Agarwal, D.A., and Ciarfella, P. The Totem single-ring ordering and membership protocol. ACM Transactions on Computer Systems 13, 4 (Nov. 1995), 311-342. 4. Birman, K.P., and van Renesse, R. Reliable Distributed Computing with the Isis Toolkit. IEEE Computer Society Press, Los Alamitos, Calif., 1994. 5. Chandra, T.D., and Toueg, S. Unreliable failure detectors for reliable distributed systems. To appear in Journal of the ACM. 6. Dolev, D., and Malkhi, D. The Transis approach to high-availability cluster communication. Commun. ACM, 39 4 (April 1996). 7. Fischer, M.J., Lynch, N.A., and Paterson, M.S. Impossibility of distributed consensus with one faulty process. Journal of the ACM 322 (April 1985) 374-382. 8. Kaashoek, M.F., and Tanenbaum, A.S. Group communication in the Amoeba distributed operating system. In Proceedings of the 11 th IEEE International Conference on Distributed Computing Systems (Arlington, Tex.) May 1991, pp. 222-230. 9. Kopetz, H., Damm, A., Koza, C., Mulazzani, M., Schwabl, W.,

Senft, C., and Zainlinger, R. Distributed fault-tolerant real-time systems: The Mars approach. IEEE Micro 9, 1 (Feb. 1989) 25-40. 10. Lamport, L. Time, clocks, and the ordering of events in a distributed system. Commun. ACM 21, 7 (July 1978), 558-565. 11. Lingle-Papadopoulos, C.A. The Totem process group membership and interface. M.S. Thesis. Department of Electrical and Computer Engineering. University of California, Santa Barbara (Aug. 1994). 12. Melliar-Smith, P.M., Moser, L.E., and Agrawala,

V. Broadcast protocols for distributed systems. IEF Transactions on Parallel and Distributed Systems 1, 1 (Jan. 1990), 17-25. 13. Melliar-Smith, P.M., Moser, L.E., and Agarwal, D.A. Ring-based ordering protocols. In Proceedings of the IEE International Conference on Information Engineering (Singapore) Dec. 1991, pp. 882-891. 14. Moser, L.E., Amir, Y., Melliar-Smith, P.M., and Agarwal, D.A. Extended virtual synchrony. In Proceedings of the 14th IEEE International Conference on Distributed Computing Systems (Poznan, Poland) June 1994, pp. 56-65. 15. Moser, L.E., Melliar-Smith, P.M., and Agrawala, V. Processor membership in asynchronous distributed systems. IEEE Transactions on Parallel and

Distributed Systems 5, 5 (May 1994), 459-473. 16. Moser, L.E. and Melliar-Smith, P.M. Probabilistic bounds on message delivery for the Totem single-ring protocol. In Proceedings of the 15th IEEE Real-Time Systems Symposium (San Juan, Puerto Rico) Dec. 1994, pp. 238-248. 17. Powell, D., ed. Delta-4: A Generic Architecture for Dependable Distributed Computing (1991) Springer-Verlag, Berlin and New York. 18. van Renesse, R., Birman, K.P., and Maffei, S. Horus: A flexible group communication system. Commun. ACM 39, 4 (April 1996).

Author Affiliation: About the Authors:

LOUISE E. MOSER is an associate professor in the Department of Electrical and Computer Engineering, University of California, Santa Barbara. Author's Present Address: Department of Electrical and Computer Engineering, University of California, Santa Barbara, CA 93016; email: moser@ece.ucsb.edu

P. M. MELLARI-SMITH is a professor in the Department of Electrical and Computer Engineering, University of California, Santa Barbara. Author's Present Address: Department of Electrical and Computer Engineering, University of California, Santa Barbara, CA 93106; email: pmms@ece.ucsb.edu

DEBORAH A. AGARWAL is a staff scientist at the Ernest Orlando Lawrence Berkeley National Laboratory. Author's Present Address: Ernest Orlando Lawrence Berkeley National Laboratory, 1 Cyclotron Road, MS 50B-2239, Berkeley, CA 94720; email: daagarwal@lbl.gov

RAVI K. BUDHIA is a Ph.D. candidate in the Department of Electrical and Computer Engineering, University of California, Santa Barbara. Author's Present Address: Department of Electrical and Computer Engineering, University of California, Santa Barbara, CA 93106; email: ravi@alpha.ece.ucsb.edu

COLLEEN A. LINGLEY-PAPADOPOULOS is a software engineer at Tandem Computers. Author's Present Address: Tandem Computers, Inc., 19333 Vallco Parkway, LOC 3-22, Cupertino, CA 95014-2599; email: lingley-am@tandem.com

THIS IS THE FULL-TEXT. Copyright Association for Computing Machinery 1996  
COMPANY NAMES:

University of California-Santa Barbara

GEOGRAPHIC NAMES: US

DESCRIPTORS: Distributed processing ; Local area networks; Fault tolerance ; Real time ; Communications; Protocol; Applications; Product development

CLASSIFICATION CODES: 9190 (CN=United States); 5250 (CN=Telecommunications systems); 7500 (CN=Product planning & development)

DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.  
03146659 SUPPLIER NUMBER: 06736277 (THIS IS THE FULL TEXT)  
**Projects between the sheets. (Microsoft Excel as a database manager)**  
**(includes related article on using Excel macro capabilities)**  
Elam, Sandra  
MacUser, v4, n7, p234(8)  
July, 1988  
TEXT:  
Projects Between the Sheets

Why are so many projects overdue and overbudget? All too often it's because project requirements are out of control, which inevitably causes schedule delays and cost overruns. Using Excel, there's a simple way to get a grip on any project -- no matter how large or complex. The technique involves using a project-requirements database. With this database, you can avoid wasting time and money on your next project, easily track new or changed requirements, and clearly show through testing that your product meets all specifications.

Excel lets you automate the requirement-tracking process so you know exactly what is required on each project at any moment (often an impossible task when tracking is done manually). In addition, managers can automatically generate test plans that contain each project requirement. Because each line in the test plan is cross-referenced to the database, requirements never slip through the cracks.

Recently I created a 900-line project-requirements database in Excel to track every requirement for a \$5 million engineering project. The database was easy to set up and update and proved invaluable to the project manager during the design and testing phases of the project. You can use this kind of database to manage any business task involving a project that must be completed. Whether you're designing a car, building a subway system, or writing a procedure to test a new hair dryer, the need for a comprehensive set of requirements -- neatly categorized, easily sorted -- always exists. But you need a database manager to help you organize these requirements.

#### EXCEL: A DATABASE MANAGER?

Although Excel is widely known as the power spreadsheet, it's actually a spreadsheet, charting program, and database manager rolled into one. Excel's database manager is often overlooked, however -- although it's extremely capable. Because a project-requirements database could be set up in any database application, why use Excel? Well, Excel's database manager is as powerful as many other standalone applications and it's easy to learn. It's especially cost-effective if you already have the program for its spreadsheeting capabilities.

Like many database managers, Excel can sort a database by an unlimited number of key categories and can easily find, extract, or delete all records meeting criteria you specify. Entering database information is as simple as entering spreadsheet data -- just click on a cell, then start typing. And Excel gives you a lot of control over the format of your database, so reports printed on a LaserWriter look great.

If you already use Excel as a spreadsheet, you'll find learning the database commands a snap. Unlike some database applications that require you to enter data for each record on a separate form, in Excel you enter all data on one worksheet. Instead of displaying just one record at a time, Excel displays all records together in a table, which makes it easy to scroll through a database, updating or comparing records. The only drawback to this kind of display arises when you have more than about ten fields in your database (if you're using a standard Mac display). Because you can't

set up an entry form to show all the fields on one screen, you have to scroll back and forth across the columns (which can take up several Mac screen widths, depending on how wide each column is). The constant scrolling is somewhat annoying, but if your budget permits, you can alleviate this problem by using a large monitor.

Before I discuss how to set up a project-requirements database, I'll take a quick look at Excel's menus and the specific commands involved in database management.

#### WHAT'S ON THE MENUS?

The menu bar has eight headings: File, Edit, Formula, Format, Data, Options, Macro, and Window. The database commands are in the Data menu, but you should explore all the menus if you're not already familiar with them. Many of the basic spreadsheet commands are especially useful when you're using Excel as a database.

You use the Macro menu to write miniprograms called macros to automate repetitive tasks that you'd normally perform manually. You create a macro by having the Mac record a sequence of actions (choosing a cell or command, scrolling, opening a file, and so on) you perform. Once the Mac has recorded the sequence, you just invoke the macro and that sequence of actions is recreated. You can also finetune a macro (or create it from scratch) using Excel's macro programming language.

You don't need to know how to write a macro to set up a database, although a good macro written for your particular application can automate many database functions (such as sorting, finding, extracting, or deleting records). The sidebar "An Extra Pair of Hands" goes into more detail on the hows and whys of macros.

The UNDO command on the Edit menu is different from what you'd expect. Excel cannot undo some database commands, so be careful when sorting or deleting records. Because of UNDO'S limited capability, it's a good idea to save your database under a new name before you do anything drastic to it (more on this later).

In creating a database, you'll be doing a lot of data manipulation, so for maximum efficiency you should learn several keyboard commands by heart: Command-X for CUT, Command-C for COPY, and Command-V for PASTE. When cutting, copying, or pasting rows in a database, you must remember to select the entire row (by clicking on the row number along the left margin), not just a portion of it. This is because all information in one row is part of the same record and each record must stay intact or your database will be scrambled.

Most of the commands in the Formula menu are used to create spreadsheets, not databases, but there are two you'll use often: SELECT LAST CELL and SHOW ACTIVE CELL. SELECT LAST CELL lets you jump the last cell in your database, saving time and frustration. Imagine the agony of scrolling to the bottom of a 1000-line database!

Excel defines the "last cell" in your database as the intersection of the last row and last column that contains a cell with data or formatting information -- not as the last cell into which you've entered data. If you ever get an Out of Memory box when you think you shouldn't, choose the SELECT LAST CELL command. If Excel jumps away beyond the last cell containing data, the problem is that a bunch of empty cells have been added to the database, eating up all available memory.

To alleviate this problem, select and cut all empty cells between the last cell containing data and Excel's last cell. Then, save, close, and reopen the database. Excel will delete those empty cells from the database, significantly reducing the amount of memory consumed. Your database will save and load faster.

Another command that saves scrolling time is SHOW ACTIVE CELL. Let's

say that you click on a cell in row 50 of your database but you need to refer to row 10 for some information. Scroll up to row 10 (without clicking on another cell), find the information you need, then choose SHOW ACTIVE CELL. Excel immediately jumps back to the last cell you clicked on (the one in row 50, in this case).

The Format menu contains five commands that determine how Excel interprets and displays the data you enter: NUMBER, ALIGNMENT, STYLE, BORDER, and COLUMN WIDTH. Most of these are self-explanatory after a little exploration. In the number dialog box, you will usually choose the General format. You have to be careful when entering data such as serial numbers or part numbers because Excel sometimes automatically reformats numbers. If you enter a part number such as 3-2-88, for instance, Excel will think it's a date and will display it as 2-Mar-88. To avoid this, always add a "dummy character" such as a pound sign (#) or a space character in front of all data that Excel might think is a numeral or date. If you enter the part number as #3-2-88, Excel will treat it as text and will not try to reformat it.

#### WHERE THE ACTION IS

The specific commands you'll need to turn your data into a database are on the Data menu: FIND, EXTRACT, DELETE, SET DATABASE, SET CRITERIA, SORT, and SERIES. First, you have to tell Excel what part of your worksheet to consider as a database -- you may, for example, use parts of the same worksheet as a spreadsheet, as a scratch pad, and as a holding place for numbers used to generate graphics as well as for your database. You simply select the database portion, including column headings, then select SET DATABASE. After you have done this, you can use the other database commands on this menu. Before you can find, extract, or delete records, you must first specify and criteria that will single out the data records you're interested in. To do this, you set up a CRITERIA RANGE above the first line or below the last line of your database. You copy your column headings into this range and type criteria underneath the proper column headings. The criteria can be text or numeric values, and you can specify an exact value to be matched, a range of acceptable values (using =, <, >, <=, >=, or <> operators), or computed values based on Excel formulas. You can also use two wildcard characters when searching for text: A question mark (?) can be used to accept any single character in that position, and an asterisk (\*) can represent an indefinite number of characters. Select the entire CRITERIA RANGE, then choose the SET CRITERIA command. Then the FIND, EXTRACT, or DELETE command will act on all records meeting the criteria you specified.

The SORT command leads to a dialog box in which you specify key categories for Excel to use when sorting. The SERIES command leads to a dialog box in which you can easily generate a series of numbers (more on these commands later).

#### WITHOUT EXCEL: RUNNING AMOK

Now that you have a general idea of Excel's database capability, let's create a sample project-requirements database. For our hypothetical project, let's say a company is designing a new hair dryer. The project manager knows the dryer must meet all requirements contained in the contract and pass a rigorous test procedure derived from these requirements. But without a project-requirements database to track each requirement, he has no idea whether each requirement is being implemented as it should be.

The mechanical engineer correctly designs an on/off switch for the hair dryer with three wattage settings -- 300, 650, and 12000 watts -- but the electrical engineer purchases an 800-watt heater instead of a 1200-watt heater. Because requirements were unclear, the company wasted time and

money designing the wrong product. Each requirement that slipped through the cracks cost thousands of dollars and months of delay. The company could have avoided confusion, cost overruns, and wasted time by setting up a project-requirements database. Here's how to do it.

#### WITH EXCEL: RUNNING SMOOTHLY

The first step is to collect the sources for every project requirement. If there's a contract for this project, it probably lists the formal project requirements in a statement of work. Informal requirements can come from anywhere -- meetings with your boss, letters from customers, or a stack of Post-it notes. In some cases, you'll make up project requirements yourself.

Next, open a new Excel worksheet and start entering data. For the sample database shown in the figures, I set up six columns, or fields, namely: Sequence Number, System, Test Method, Source of Requirement Keyword, and Requirement. Depending on the project, your database may have more fields (for equipment model number, serial number quantity, or manufacturer, for instance).

Let's say that the only source of requirements for this particular project is a contract consisting of ten sentences. You enter each sentence from the contract in the Requirement column. The first sentence in the contract says: "The new hair dryer to be designed must be no longer than 4 inches overall, must have a maximum width of 4 inches, and must be a maximum of 2.5 inches tall; additionally, the handle of the dryer must fold against the rest of the unit for compact storage."

Sentences such as this often contain more than one requirement, tucking them away behind semicolons. Strip away redundant words. Don't feel obliged to type each sentence in exactly as it appears in the contract. You are trying to glean the essence of the requirement. If a sentence is too long to fit into one cell (which can hold a maximum of 108 characters), it usually contains more than one requirement. Break it into pieces and put each requirement on a separate line in the database. Then you can track each requirement individually.

In the Sequence Number column, you assign a unique number to each requirement. For short databases, you can type sequence numbers in manually, but for databases of more than, say, 20 lines, you should use the SERIES command on the Data menu to insert this sequence -- it's fast and easy to use. Select the Sequence Number column, choose SERIES, then click on the OK button. Excel automatically inserts a sequence of numbers in the selected column.

Because a different sequence number is used for each requirement, it uniquely identifies that requirement. Sequence numbers are crucial in tracking requirements. They also allow you to cross-reference your contract (or other sources) with your database and the database with your test plan. If you delete a requirement from your database, renumber all sequence numbers from that point on (using the SERIES command); otherwise, gaps in the number sequence will make it seem as if some requirements have been accidentally lost.

In the source of requirement column, record where each requirement came from. Knowing the source sentence (or paragraph, conversation, memo, and so on) for each requirement lets you document that each requirement is, in fact, required. When the inevitable happens and you're accused of inventing or distorting requirements, this column is your defense.

The System column identifies each major part of the project (in this case, each system in the hair dryer). Each requirement will eventually be sorted into one of these systems. If you're writing a review of a Macintosh software product instead of designing a hair dryer, this column might contain topic headings. You might have six topic headings: Lead, Features,

Bugs, Recommendations, Summary, and Rating. You would assign each idea (that is, requirement) to one of these headings. Just keep in mind that this column must divide your project into major parts, sections, or systems.

In the Keyword column, you choose a word that instantly categorizes the requirement and helps sort the database into a meaningful order. For the sample database, the keyword is a piece of equipment -- the part of the hair dryer to which the requirement refers. When designing a product that will eventually be tested, the keyword should always be a piece of equipment. On the other hand, if you are writing a Macintosh product review, the Keyword column should contain a keyword that summarizes the main idea in each requirement. Because keywords will be sorted into alphabetical order, be sure you use any abbreviations consistently.

Obviously, you only need a Test Method column if you're designing something that will be tested. Nearly all the projects go through a test phase, although it's not always immediately obvious. For the sample database, you categorize each hair dryer requirement according to how it should be tested: by measuring, observing, or operating. If you're writing a software review, Test Method might include editing, proofreading, or having someone else read through the article.

#### SORTING THINGS OUT

Before sorting, save the database under a new name. As mentioned earlier, Excel cannot undo a sort, so if you make a mistake sorting your original database and you haven't saved it under a new name, you're in trouble! Once you've saved the database under a new name, though, any sorting mistakes will not affect your original database--to which you can easily return, if necessary.

The most useful way to organize the sample database is to sort first by System, then by Test Method, and finally by Keyword. To do this, you first select your entire database, choose SET DATA-BASE, then select the part of your data-base you want to sort -- everything except the column headings. You never want to select the column headings when sorting because they'll get jumbled up with the rest of your database (because sorting is done alphabetically).

Next, choose the SORT command on the Data menu to bring up the Sort dialog box. Here you tell Excel which categories, or keys, to use in sorting. To first sort by System, type the address of any cell within the System column in the 1st Key box. (Although \$B\$4 is shown, you can type any cell address in the range from \$B\$4 to \$B\$15.) You can also specify a "nested" sort within a sort. To subsort by Test Method and then Keyword, type in appropriate cell addresses as the 2nd and 3rd Keys.

This sort separates the project by system (mechanical from electrical in the hair dryer example), pulls together all requirements that will be verified by the same test method, and finally pulls together all requirements that involve the same piece of equipment. After a few seconds, Excel reshuffles each requirement into the correct order.

You can always regain your original database order by sorting the Sequence Number column in ascending order -- but only if each requirement has a correct sequence number. If you've forgotten to assign sequence numbers to some requirement and try this sort, they'll be shuffled to the bottom of the database.

The sample database required only three keys to sort it completely, but in your database you might need to subsort by more than the three keys allowed in the Sort dialog. You can coax Excel to sort by an unlimited number of keys by sorting in stages. If you want to sort by six keys, for example, you first sort by the three least important keys, then sort a second time by the three most important keys. (Before starting experimental

sorting, though, remember to save your database under a new name to avoid possible disaster!).

Because all sorting is done alphabetically or numerically, you must be consistent in entering data. Correct all typos and standardize all terminology and abbreviations before you sort.

#### TESTING ... 1... 2... 3

By automatically generating a test plan from the sample database and successfully running it, you can verify that all the requirements have been met. Because the database is sorted by System, Test Method, and Keyword, it's already in the correct sequence for testing. After saving the sorted database under a new name, you can begin transforming it into a test plan. Separate the requirements into tables (according to system and test method to be used) and number and title each table. Next, format the test plan -- this involves hiding unnecessary columns by reducing those column widths to zero. You can easily re-expose a hidden column at any time by selecting the columns on both sides of it and then resetting the width in the Column Widths dialog box in the Format menu.

As you format the test plan, you may want to add new columns that are useful in a test procedure, such as Test Results and Comments columns. Finally, save and print the test plan. This printout can be used as an actual test procedure or can serve as a high-level test plan from which more detailed procedures can be written.

#### TIPS ON PRINTING AND ASSEMBLING

Printing and assembling an Excel database can be tricky if it stretches across more than two Macintosh screen widths. Although you have a lot of control over formatting, you really have to be creative to cram all your data onto two pages.

You definitely need a LaserWriter for printing -- not only because it prints small or compressed fonts legibly but also because it can shrink your database in increments of 1% until the printed output fits on two pages. You can assemble two pages facing each other in book style, but if your database stretches across more than two pages, there's no easy way to assemble the hard-copy output properly. An ImageWriter can only shrink printed output by 50%, so it can't be used for shrinking most database output because a 50% reduction makes most text unreadable. (You can work around this limitation to some extent by increasing the font size and column widths a little and then reducing them by 50%.)

#### THIS JUST IN

To be truly useful, a project-requirements database should be updated each time a project's requirements change. First, archive the old revision of the database, and then save it under a new name with a new revision number. The most important things to remember when updating your database is that you must keep track of all changes. An easy way to do this is by formatting all new or changed records in bold italics and compiling a summary page at the front of your database listing every change that was made. These techniques allow for easy tracking of changes between subsequent versions of the database.

If you add any new lines to the database, remember to renumber your Sequence Number column with a new sequential series of numbers (using the SERIES command). Doing this will assign new sequence numbers to some of the requirements each time the database is updated. If you want to keep the same sequence numbers throughout the life of a project, you'll have to manually number new requirements and leave blanks for deleted requirements. This kind of numbering scheme can lead to problems, though, as the following example illustrates.

In the hair-dryer database, suppose you add two new requirements to the middle of the database (between requirements 5 and 6, say). The

sequence numbers of all requirements after them will then be incorrect. You could correct them by using the SERIES command to assign a new sequence number to each requirement or you could manually number the new requirements 5.1 and 5.2. Then, however, you could no longer tell how many requirements you had by looking at the number sequence, and you wouldn't know that some requirements were missing if they were accidentally deleted. You'll have to decide which is more important to you: keeping your sequence numbers consecutive or keeping them consistent.

Using a project-requirements database in Excel, you can ease your burden as a project manager by reducing schedule delays and cost overruns -- whether your project is manufacturing a product, writing a document, planning a wedding, or running for president. It takes some effort to plan ahead, but once you see how much you've saved -- in time, money, and headaches -- you'll agree it was worth the effort.

#### An Extra Pair of Hands

Excel macros let you automate repetitive tasks needed to create and maintain databases. A macro replaces a sequence of keystrokes and mouseclicks with a single command. Like a player piano roll, a macro stores information that -- when executed -- guides a pair of invisible hands across the keyboard.

Creating macros in Excel is easy, once you know the basic steps. Excel helps you write macros with the RECORD command, located in the Macro menu. When you play back a RECORDED sequence, Excel acts just as if you had typed in that sequence of keystrokes. You can also edit a RECORDED macro to make it more efficient or more broadly applicable.

I created three macros to simplify maintenance of a project requirements database. One makes sorting the database easier, another takes care of renumbering project requirements after you've added new ones, and the last simplifies adding new items to the database.

First, however, you should do a couple of things to your database to prepare it for use with macros. For starters, it helps to shorten the column headings so that more columns fit in a single screen width, so you can better see what you're doing. You should also change the header labels so that all of them are unique and fit in a single row (because Excel doesn't recognize two-line database headers). I also put my criteria range at the top of the worksheet, since putting it at the bottom can cause problems as the database range expands.

To build a macro, create a new macro sheet using the NEW command on the File menu. To record the Sort macro, I entered the label Sort into the macro sheet, and used DEFINE NAME to identify that cell as the starting point for the macro called Sort. I also selected Command in the dialog box, and entered the letter 's' into the shortcut box. The Sort macro can then be started by using RUN from the Macro menu (and selecting Sort from the subsequent dialog box) or by simply executing an Option-command-S.

Next, I chose SET RECORDER from the MACro menu, and activated my database worksheet. After choosing START RECORDER from the Macro menu, all keystrokes and mouseclicks are recorded onto the Macro sheet (until STOP RECORDER is selected).

I recorded the following steps; First, I selected everything in the database range except the column labels. Next, I chose SORT from the Data menu and did a sort. Finally, I stopped the recorder.

Often, you can use a recorded macro "as is" but, in this case, I wanted a more generic macro. I reactivated the macro sheet and clicked on the cell containing the =SELECT... formula.

I changed the formula to read as follows: =SELECT(INDEX( !Database,2,0): INDEX( !Database, ROWS( !Database),0)).

This statement makes use of a few of Excel's more powerful

non-recordable functions.

The INDEX function selects the particular row, column, or cell specified by the arguments that follow in parentheses. In English, the macro statement reads: "Select the area from the second row and first column of the area called 'Database' to the last row and first column of the same 'Database' area." The name Database was automatically defined when you used the SET DATABASE command. Using this generic name lets the macro adjust automatically, as the database range expands and contracts. Similarly, the "!" in this syntax refers to the active worksheet, regardless of its name.

I made the sort statement generic by changing it to =SORT?(). This syntax prompts the user with the standard sort dialog box. Finally, I had the sort macro invoke a SAVE AS (to make sure that may old data won't accidentally get "clobbered") by manually inserting the following statement: =SAVE.A- S?("Enter a new file name.").

The ReNumber macro chooses the area from the first cell of the second row to the first cell of the last row of the database using the INDEX function. Having done this, it enters a 1 into the active (top) cell in this column, and uses the SERIES command from the Data menu to assign sequential numbers down the column. The macro also restores the active cell or range to whatever it was before you invoked teh macro. It does this by creating a temporary name (BookMark) associated wtih the range that's active when the macro is first invoked. The command FORMULA.GOTO(!BookMark) restores it as the active range when the macro is done renumbering.

The AddRow macro adds a new row to the database, based on the location of the active cell just before the macro is invoked. The macro has to be smart enough to know whether you're adding to the middle or to the end of the database. Adding a row to the middle is easy, but, if you want to add to the bottom of the database, you need to reset the database range. An IF command checks which of two subroutines (AddBottom or Dolnser)is appropriate. In either case, the AddRow macro formats the new row as bold and italic.

Finally, it executes the ReNumber macro as a command within the AddRow macro.

COPYRIGHT 1988 Ziff-Davis Publishing Company